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ABSTRACT

This publication is an annual statistical report describing conditions in education as well as those in the larger society that affect education. In this year's report, statistical data are presented on a wide variety of issues concerning educational institutions, participants, and personnel. Each entry on a topic consists of a table and a chart presented together. The data, highlighted in the chart and briefly described in a statement accompanying the chart, are extracted from the facing table. The first part of the report describes trends and developments affecting education at all levels. Chapter 1 deals with the societal context for describing the condition of education, chapter 2 covers elementary and secondary education, and chapter 3 examines postsecondary education. In the second part of the report, special topics have been selected for closer analysis. Chapter 4 looks at education personnel, chapter 5 examines the financing of higher education, and chapter 6 compares education and labor force participation patterns in the United States with those in other selected countries. A cumulative index lists topics and data shown in the 1975, 1976, and 1977 editions, as well as in the present edition. (Author/MLF)

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The Condition of Education

1978 Edition

Statistical Report

ED155811

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EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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EA 010 691

National
Center for
Education
Statistics

What's News on the Inside

The Social Context

- Leaders in education now rate the highest expression of public confidence they have enjoyed since 1974. Only medical leaders command a higher level of public confidence (entry 1.3).

- Residents were less likely to find local schools inadequate than other neighborhood services, but more likely to want to move if they did (entry 1.2).

- Nearly 80 percent of parents with elementary school-age children hope, and over 60 percent expect, that their children will attend college (entry 1.1).

- Handicapped children 5 to 13 years old are as likely to be enrolled in school as others that age, but handicapped 14-to-25-year-olds are less likely to be enrolled (entry 1.16).

Elementary and Secondary Education

- Discipline ranks as the foremost problem in the public schools, according to both teachers and parents of public school students (entries 2.1 and 2.2).

- Most whites and blacks agree that white and black students should go to the same schools, but 85 percent of the whites and 50 percent of the blacks oppose interdistrict busing (entry 2.4).

- Disparities between rich and poor school systems have diminished in about half of the States that have enacted financial reforms and in fewer than 20 percent of the States without such reforms (entry 2.13).

- Between 1971 and 1975 reading performance improved slightly among 9-year-olds and remained stable among 13- and 17-year-olds. The scores of black 9-year-olds in the Southeast showed the greatest improvement, while performance among black 13- and 17-year-olds in other regions declined slightly (entry 2.23).

- About 54 percent of recent college graduates who applied to teach in elementary and secondary schools found full-time teaching positions in the year following graduation. Of those qualified to teach special education, more than two-thirds found full-time teaching jobs, while only one-third of those qualified in the social sciences did (entries 4.2 and 4.3).

- The supply of persons newly qualified to teach in elementary and secondary schools exceeded the demand by about 80,000 in 1976 (entry 4.6).

Postsecondary Education

- Among 18-to-24-year-old high school graduates not in school, 43 percent of the whites, 56 percent of the blacks, and 52 percent of the Hispanics expressed interest in attending postsecondary schools (entry 3.2).

- The number of black college students rose by over 275 percent between 1966 and 1976, while the proportion of all college students who are black increased from 5 percent to 11 percent (entry 3.7).

- Among 1972 high school graduates who attended college, those receiving financial aid were less likely to withdraw and more likely to graduate from college by 1976 than were those not receiving aid (entries 3.14 and 3.15).

- Student charges for tuition, board, and room at institutions of higher education as a percentage of median family income have changed little since 1967 (entry 5.13).

- In 1977 over half of all families with an 18-year-old child also had another child of college age (entry 5.14).

- Between 1970 and 1976, the number of full-time faculty at institutions of higher education at the rank of instructor or above increased 18 percent while the number of such part-time faculty increased 91 percent (entry 4.12).

- The number of adults in basic and secondary education more than doubled between 1972 and 1976. Over 50 percent of the participants in 1976 were black, Asian, or Hispanic (entry 3.22).

The Condition of Education 1978 Edition

Statistical Report
National Center for Education Statistics

Edited by
Mary A. Golladay
and Jay Noell

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NCES 78-405

National Center for Education Statistics

"The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries."—Section 406 (b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

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Foreword

The Condition of Education is an annual statistical report describing conditions in education as well as those in the larger society that affect education. It is prepared by the National Center for Education Statistics as required by Public Law 93-380, Title V, Section 501 (a). This is the fourth such report to appear.

In this year's report, statistical data are presented on a wide variety of issues concerning educational institutions, participants, and personnel. The report is organized to reflect the characteristics of the education system and its relationship to the larger society. The first part of this report describes trends and developments affecting education at all levels. Chapter 1 deals with the societal context for describing the condition of education, chapter 2 covers elementary and secondary education, and chapter 3 examines postsecondary education. In the second part of the report, special topics have been selected for closer analysis. Chapter 4 looks at education personnel, chapter 5 examines the financing of higher education, and chapter 6 compares education and labor force participation patterns in the United States with those in other selected countries.

An effort was made in preparing this report to address a broad range of significant issues at all levels of education. Data on emerging as well as recurring issues are reported. Many of the statistics presented here relate to issues not included in previous editions of this report. To aid readers desiring statistics on other topics or more data on a particular issue, a cumulative index lists topics and data shown in the 1975, 1976, and 1977 editions, as well as in the present edition.

Part Two of this report contains a description of the activities of the Center for fiscal years 1978 and 1979. We hope that this report will be helpful to the reader in understanding the information and services available in the National Center for Education Statistics.

This report incorporates a new format for presenting data. Each entry on a topic consists of a table and a chart, which are presented together. The data highlighted in the chart, and briefly described in a statement accompanying the chart, are extracted from the facing table. Data used in the chart appear in boldface type in the table, which may be readily consulted for further information.

Marie D. Eldridge
Administrator
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Part One of *The Condition of Education, 1978,* was prepared by the National Center for Education Statistics(NCES) in the Division of Statistical Services under the supervision of Mary A. Golladay, Acting Division Director.

Mary A. Golladay and Jay Noell were responsible for the development and preparation of the report. Valena White Plisko worked on all aspects of the production of the report. Harold B. Wheeler, Carol I. Senden, and Marc Weinstein assisted in various parts of the preparation of the report. Nadine Edles provided editorial assistance. Nadine Brown, Esther Cooper, and Yvette Rodgers assisted in checking the statistical tables. Robert Heintze updated the cumulative index.

Typing of the manuscript was the primary responsibility of Celeste Threatt. Goldie Gordon, Yvette Rodgers, Imelda Hodge, Sherrill Nichols, Melanie Bigelow, and Barbara Head also typed portions of the text.

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The Condition of Education

1 An Overview of Education

Chapter 1
A Context for Examining the Condition of Education

by Valena White Plisko

Of all our social institutions, formal education is perhaps the most open. It engages the vast majority of Americans at one or more periods in their lives. Its boundaries continue to expand with the extension of learning opportunities to new groups in the population. Its resources are subject to control by many levels of government. It is accountable to various groups with sometimes conflicting interests.

Because of its open character, formal education is also receptive to change. It has undergone profound transformations in response to the changing needs of society and of the individual. As society has become increasingly complex and interrelated, formal education has grown in size, complexity, and diversity.

As an open, adaptive system, formal education is a primary agent of technological and social change. While responding to trends in the larger environment, the educational system develops new adaptations for society. In the late 1950's it helped to launch the Nation into space exploration by contributing the necessary technical skills and manpower. More recently, it has opened access to the American mainstream by affording learning opportunities to groups traditionally excluded. In the future, as society becomes increasingly specialized and diversified, the education system will play an even more active role in matching the abilities and expectations of its participants with the skills and orientations needed by society.

This chapter considers the changing conditions in the larger society to which education must adapt. It begins by examining societal developments which indirectly influence education. These include: recent trends in the public's regard for education; current conditions in the labor market; and additional developments associated with participation in education. Following a review of these developments is a discussion of inputs into the educational system, including the needs of the population for schooling and the resources available to meet these needs.

Public Opinion

Education is profoundly affected by public sentiment. The strength of the public's belief in education is one measure of education's importance. Education matters if people believe that it makes a difference. When people believe in its significance, they will invest time and money in its support, which in turn will enhance the value of education.

The American public expresses a high personal commitment to education. According to a recent survey of parents of elementary school students, parents desire and expect that their children will spend a large portion of their young lives in the education system (entry 1.1). More than three-fourths of all parents hope that their children will go beyond high school and at least a third expect that their children will finish college. Although the aspirations and expectations are slightly lower for daughters, most parents expect that their daughters will receive some college education. Clearly parents are concerned with the quality and quantity of their children's education.

On the local level, most residents believe that education is performing adequately compared to other neighborhood services (entry 1.2). Only a small proportion, 4 percent, considers the local school inadequate. Of those dissatisfied with the schools, more than one-fourth wish to move because of their dissatisfaction. In contrast, 10 times as many residents find public transportation inadequate but only 4 percent want to move as a result. Clearly, education is the neighborhood service most often considered adequate; when judged inadequate, it is the least likely to be tolerated. The fact that residents are concerned enough to consider moving underscores the importance of education in the public's view.

To say that the overwhelming majority of the public considers the schools adequate does not mean that the public sees no need for improvement. Last year's edition of this report showed that more than half of the public agreed that the reported decreases in test scores indicated a general decline in the quality of public education. An updated poll by CBS/New York Times indicates that this response has changed little since 1976. As the following chapters will show, the public and education professionals do recognize some serious problems in providing quality education.

Despite the cited need for improvements, the public has confidence in the people running the education system (entry 1.3). Confidence in education leaders has risen from a low in 1975, when public support for other institutional leaders also waned. Education leaders currently engender considerable regard, ranking only below leaders in medicine in the public's estimation. Over 40 percent of the respondents indicate a great deal of confidence in education leaders, while fewer than 9 percent express a lack of confidence.

Education and Work

The public values education because of the outcomes associated with it, not the least of these being economic betterment. Although economic enhancement is not necessarily synonymous with a better life, economic variables provide the most readily available measures of individual well-being. Because of their importance and their availability, economic indicators will be discussed in relation to educational attainment.

Considerable research has been conducted on the association between educational attainment and economic achievement. Several studies have raised serious questions about the magnitude and the causal direction of the relationship. Despite these questions, most research indicates that education is clearly associated with employment, earnings, and occupational attainment.

A look at young adults in the labor force suggests that educational attainment is associated with their employment status (entry 1.4). Among whites, the unemployment rate of high school dropouts is twice the rate of high school graduates and three times that of college graduates. Among blacks and Hispanics, high school graduates have appreciably lower unemployment rates than dropouts, although their rates are still above the national average. However, minority persons with some college but without a degree are likely to have higher unemployment rates than high school graduates with no college experience. Only among college graduates does the black unemployment rate fall substantially below the national average.

An examination of annual income among young workers further illustrates that education is associated with enhanced earning power (entry 1.5). To adjust for differences in sex, age, and hours worked, earnings of males and females, 25 to 34 years old, employed full-time, year-round were considered separately. Even though young people with more education have less work experience, they earn substantially more than their counterparts with less education. Although real income has declined slightly since 1968 among all educational groups, income differentials between groups remain. College graduates can expect to earn annually almost twice as much as persons without a high school education. However, although this relationship between education and earnings holds for both male and female workers, on the average female college graduates continue to earn less than male high school graduates.

A long-term study of male 1957 Wisconsin high school graduates provides further evidence of the relationship between educational attainment and earning power. This study compared the unique effects of educational attainment, mental ability, and parental income on earnings of workers at several intervals after high school graduation. Eight years after graduating from high school, a young man's earnings were more strongly associated with his family background than with his years of further education or his intelligence (entry 1.6). Only after 10 years did educational attainment begin exerting an appreciable influence on earnings. Twelve years out of school, education surpassed background in explaining earning differentials. After 14 years, each additional year of postsecondary schooling translated directly into a 5 percent earning advantage. The study indicates that the effects of schooling may not be fully realized—or appreciated—until many years after the educational experience.

Schooling is not only associated with employment and earning potential, it is also related to placement in the occupational structure. For both men and women, greater educational attainment is associated with movement upward in occupational rank (entry 1.7). Among persons with less than a high school education, men are more likely to be engaged in manual work and women in service occupations. Earning a high school diploma more than doubles the likelihood of white-collar work for women by providing access to clerical fields. Graduating from college stands as a threshold to the professions; male and female college graduates are 10 times as likely to be found in the professions as persons who have not gone beyond high school and at least 3 times as likely as persons with some college experience but no degree. As these comparisons show, education is related to individual economic well-being in very important ways.

Social and Demographic Trends

Graduation from high school by the majority of the adult population was achieved in 1967 and is still not fully attained by some groups. Progress is documented by the proportion of high school graduates represented in various age groups (entry 1.8). Slightly over a third of all persons 65 years of age or older are high school graduates. Within this age group, whites are almost three times as likely as blacks to have finished high school. Looking down the age categories to the younger adult groups, one finds that the proportion graduating from high school increases substantially in all racial/ethnic groups. Disparities have diminished appreciably among 25- to 29-year-olds, yet fewer than three-fourths of the blacks and only 58 percent of the Hispanics have completed high school.

Although outside the domain of formal schooling, the increased participation of women in the labor force is a significant trend affecting education. In dramatic contrast to the participation of males, participation of females has risen by two-thirds over the last 30 years (entry 1.9). The increased participation in the labor force of married females has contributed greatly to this rise. Even more remarkable has been the five-fold increase since 1940 in the proportion of mothers in the labor force. By 1976, the participation rate of mothers was 49 percent, 2 percentage points higher than the rate for all women. During the 1940's and 1950's, the sharpest rise in participation occurred among mothers of school-age children. Since the early 1960's, the most rapid expansion of participation has occurred among mothers of preschool children.

This development has important repercussions for education at several levels. Increased labor force participation has generated a marked demand for postsecondary schooling among women. As will be documented in chapter 3, women are seeking further schooling at an unprecedented rate. They comprise nearly one-half the undergraduate enrollment in colleges and universities and their numbers are increasing in graduate and professional schools.

Increased participation of women in the labor force and in postsecondary education may also affect the educational services provided for their children. Whereas the total population under 18 years old declined by 8 percent over the last 7 years, the number of children with working mothers rose by 13 percent (entry 1.10). Children 6 to 17 years old with mothers in the labor force now comprise a majority of all school-age children. At the preprimary level, the proportion of children with working mothers has risen even more dramatically. In 7 years, the percentage of children under 6 years old with working mothers has increased by a third, to 38 percent. Undoubtedly this development will heighten the demand for preprimary educational programs and will necessitate some adjustments at the elementary and secondary level.

The extension of participation in education and work has not been accompanied by as great an expansion in the job market for some fields. Despite growth in the number of professional jobs in the last 10 years, the greater relative growth in the number of college graduates has meant increased competition for professional employment. Though the proportion of college graduates in professional, technical, and kindred occupations remains quite high (58 percent in 1976), it has decreased over the past decade (entry 1.11). In 1966, 60 percent of male college graduates and 80 percent of female college graduates held professional jobs. By 1976, these percentages declined to 53 percent and 68 percent, respectively. The decline in professional employment of male college graduates is due in part to smaller proportions of them being employed in engineering and medical and health fields. Among females, almost four-fifths of the decline is attributable to the smaller proportion employed in teaching. Although the percentage of women in managerial positions doubled during this period, the proportion in clerical work also rose substantially.

The magnitude and effects of these developments are difficult to gauge. Although forecasting job availability in the future is problematic, recent studies suggest that a sizeable proportion of college graduates will be employed in occupations which have not traditionally required college training. Chapter 3 provides some indication of the current underemployment of recent college graduates.

Having considered the larger social context for education, one may now focus upon the factors having an immediate impact on the system, specifically the inputs to the system. The size and composition of the population to be educated and the extent of funding available to educate this population are the two most important factors affecting the system.

School-Age Population

Because of the democratic character of American schooling, describing the participants in education becomes a matter of describing the American people. The distribution and composition of the population being served are reflected in the complexity of the educational system.

The size of the population to be educated has perhaps the greatest impact on the education system. In the past, the system had to accommodate unprecedented growth by expanding at all levels. The end of the baby boom brought this expansion to a close, and the resulting declines in enrollment were, until recently, felt primarily at the elementary school level (entry 1.12). After 1976, the size of the 14- to 17-year-old group also began to decrease, affecting the secondary schools. In many parts of the country, school systems have had to adjust by closing schools, cutting programs, or reducing staff at the elementary school level with similar adjustments expected at the secondary school level.

On the other hand, the postsecondary level, while not as age-dependent, is experiencing the effects of the baby boom population coming into adulthood. The 18- to 24-year-old group will continue to grow until the early 1980's, swelling the numbers in postsecondary schools. The number in the next older age group, the 25- to 34-year-olds, will also increase further, expanding the pool of potential participants in postsecondary education.

Though the Nation as a whole has experienced declines in the school-age population in the 1970's, the impact of the declines has been felt more in some States due to out-migration (entry 1.13). The most pronounced out-migration has occurred in the Mid-Atlantic and North Central States, while the greatest growth attributable to migration has been experienced in the Western Mountain States. However, even within regions, migration has not been uniform. For instance, in Florida in-migration increased the school age population by 17 percent, whereas in neighboring States, migration had little effect. Just as the impact of declining enrollments has been differentially experienced, the implications of the declines may vary across school systems.

The school-age population can be characterized not only by its size and distribution but also by its diversity. Current information on the characteristics of the population is available from the recent Survey of Income and Education. The survey provides needed statistics on the number of children in poverty families, in non-English-speaking households, and with handicapping conditions, as well as data on other socioeconomic characteristics of the population.

Despite the attention that has been given to the problem of poverty, the poverty rate among families with children 5 to 17 years old has changed little since 1970 (entry 1.14). However, there have been significant regional shifts in families below the poverty level. The poverty rate continues to be highest in the South. Yet, over the past 6 years, the South has experienced the most significant reduction in the poverty rate. Significant increases in poverty have occurred in six northern States which have also experienced considerable out-migration. The problem of poverty may be compounded in these States by the migration of both population and potential tax dollars out of the area.

The education system must accommodate children with special language needs. The Survey of Income and Education also documents the regional distribution of children from non-English-speaking households (entry 1.15). For the Nation as a whole, more than 9 percent of the 4- to 18-year-old population live in households where a language other than English is spoken. This population is concentrated in 12 States. In three southwestern States, more than one-fourth of the children reside in such households (usually Spanish-speaking). Outside of the Sunbelt, three States, New York, New Jersey, and Connecticut, have greater than average proportions of school-age children from non-English-speaking backgrounds.

The needs of the handicapped population have been more fully recognized in recent years. Recent statutes and their implementing regulations requiring equal access to services and facilities for the handicapped should have important ramifications for the education system. Household data from the Survey of Income and Education provide a national count of the school-age population with handicapping conditions (entry 1.16). Of the total population 5 to 25 years old, approximately 7 percent are handicapped, amounting to almost 5½ million people of school-age. In the 5- to 13-year-old group, the handicapped are as likely to be enrolled in school as the general population. Among the older age groups, those of secondary school and college age, enrollment of the handicapped falls below that of the general population. Whereas 36 percent of the total 18- to 25-year-old population are enrolled in school, 29 percent of the handicapped group participate. Among the specific handicaps identified, respiratory disorders are the most common handicaps in the elementary and secondary school-age population. Mental retardation, crippling conditions, and respiratory disorders are the most prevalent handicaps among the oldest age group.

Financial Support

While public opinion serves as one indicator of education's importance, financial support demonstrates, in more concrete terms, how much the American people value education. It is through spending that support for education by individuals and institutions is manifested.

This country has channeled a large portion of its collective wealth into education. Since the end of World War II, an increasing share of the GNP has been devoted to financing education (entry 1.17). Whereas over the past 30 years the GNP rose sixfold, during the same period, education expenditures experienced a phenomenal 19-fold increase. Even after adjusting for inflation, education expenditures have increased by at least 500 percent since 1949. Only in the last 4 years has the steady rise in education expenditures as a share of the GNP begun to waver. In 1973 and in 1976, education's share of the GNP fell slightly under the percentage reported in the previous year.

In recent years, the health sector has outstripped defense as a competitor for national resources. For 1975, the latest year for which comparable health statistics are available, the American people spent approximately $10 billion more on health care than on educational services. Increased competition from the health sector reflects not only conscious policy decisions but also underlying population dynamics.

Primary responsibility for providing public education is vested in State and local governments. The weight of the responsibility can be measured in State and local dollars channelled into education (entry 1.18). Over the last quarter of a century, education has commanded the largest single share of State and local governmental expenditures. In the late 1960's almost 41 percent of State and local dollars were spent on education. Since then the share devoted to education has dropped somewhat, to 38 percent in 1976. As was previously noted, education must compete increasingly with welfare and health services for State and local funds.

Table 1.1
Parental aspirations and expectations for their children's [1] educational attainment: 1976

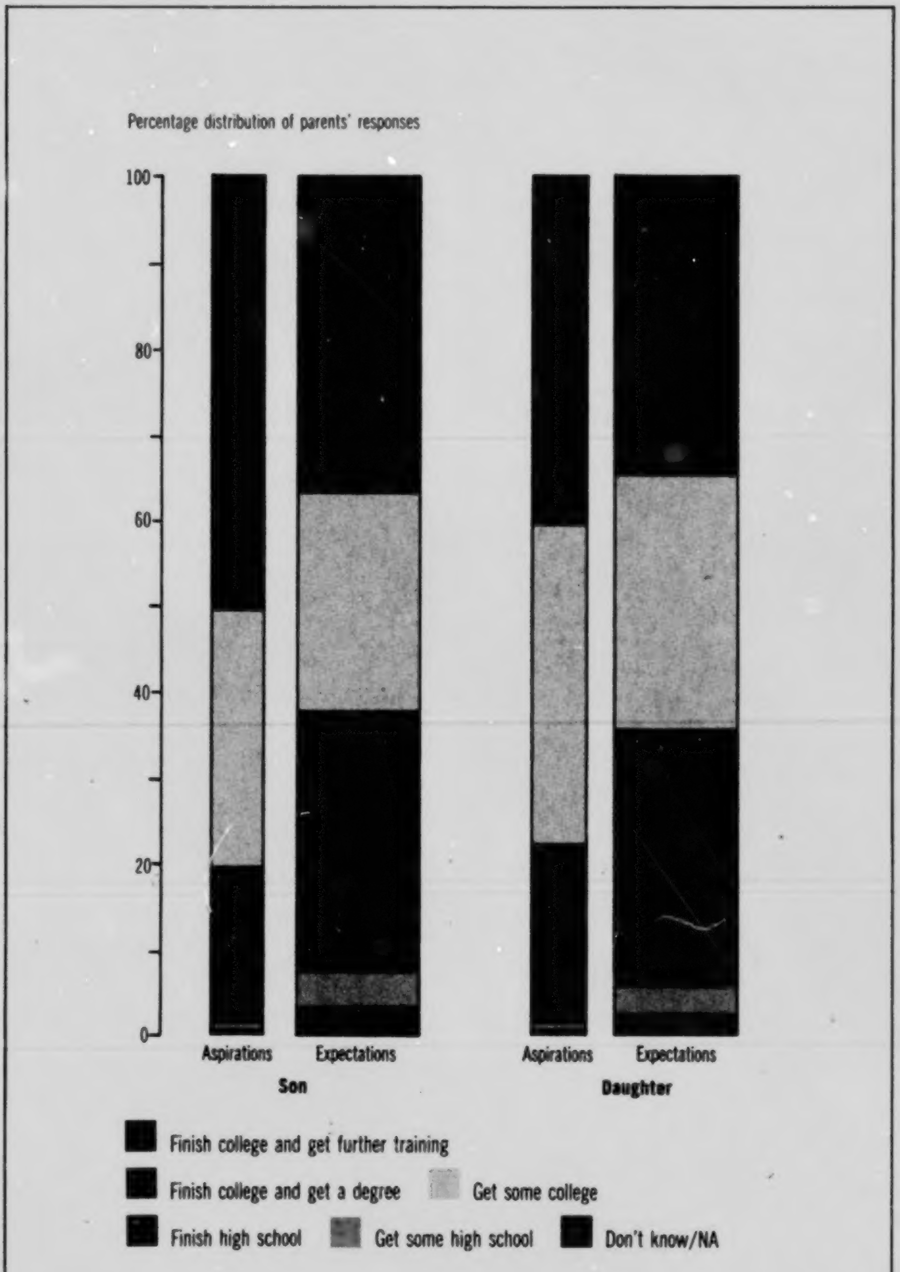
Educational level	Percentage distribution of responses					
	Parental aspirations (how far would like child to go)			Parental expectations (how far child really will go)		
	Total	Sons	Daughters	Total	Sons	Daughters
TOTAL	100.0	**100.0**	**100.0**	100.0	**100.0**	**100.0**
Get some high school	0.6	**0.7**	**0.6**	3.8	**4.2**	**3.5**
Finish high school	20.0	**18.8**	**21.1**	30.3	**30.1**	**30.5**
Get some college	33.5	**29.9**	**37.1**	27.6	**25.5**	**29.7**
Finish college and get a degree	27.1	**28.9**	**25.3**	23.3	**23.6**	**23.0**
Finish college and get further training	18.6	**21.5**	**15.7**	11.9	**12.9**	**10.8**
Don't know/no response	0.2	**0.2**	**0.2**	3.1	**3.6**	**2.6**

[1] Children, 7 to 11 years old.

SOURCE: Foundation for Child Development, National Survey of Children, unpublished data.

Chart 1.1
Parents' Educational Aspirations and Expectations for Their Children

The overwhelming majority of parents expect that their children will attend college. At least one-third of the parents anticipate that their children will graduate from college.



NCES

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Table 1.2

Adequacy of schools and other neighborhood services: Public opinion, 1975

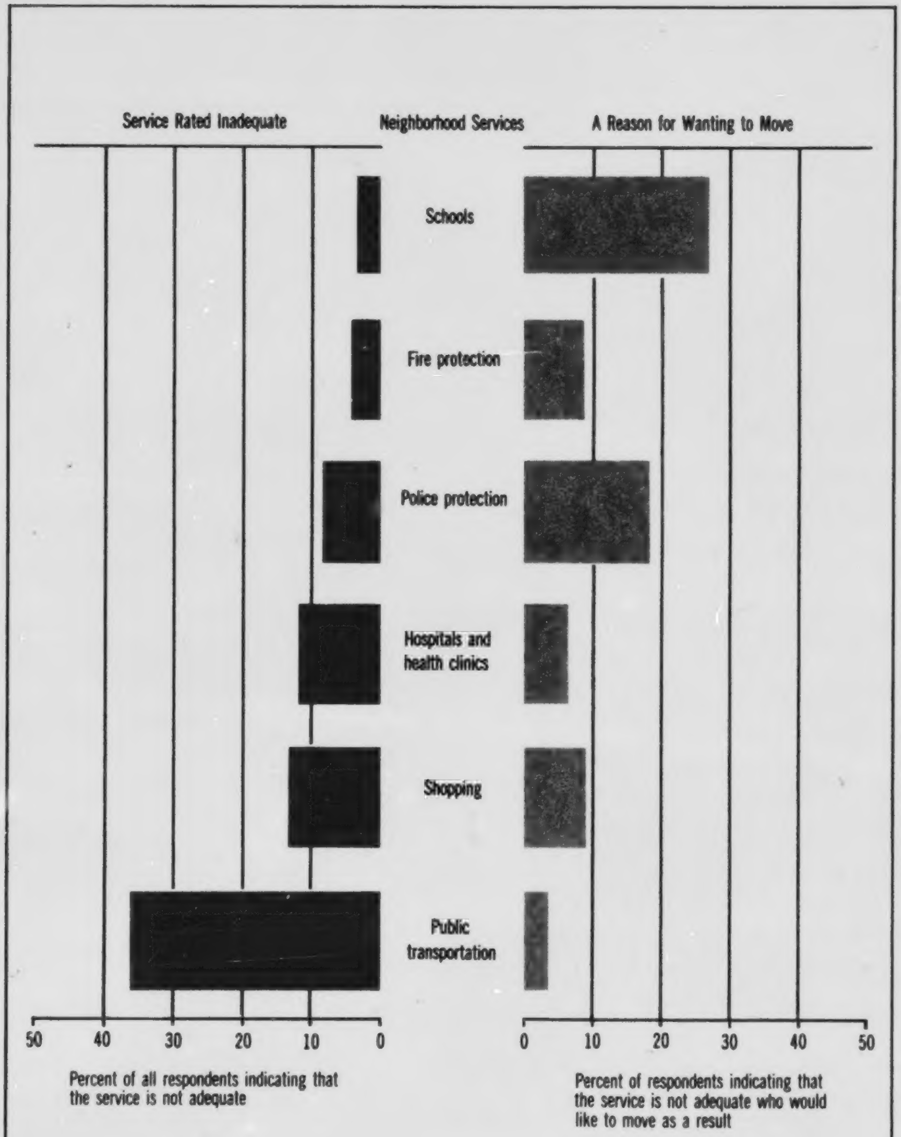
Item	Percent of respondents	Percent of respondents indicating that the service is inadequate who would like to move as a result
TOTAL	100.0	—
All services adequate	50.5	—
One or more services not adequate	49.0	9.4
Specific service not adequate:		
Schools	3.6	27.3
Fire protection	4.3	9.3
Police protection	8.4	18.3
Hospitals and health clinics	11.8	6.8
Shopping	13.3	9.3
Public transportation	36.0	4.3
Don't know or not reported	0.4	—

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Housing Reports, *Annual Housing Survey: 1975*, Series H-150-75F.

Chart 1.2
Rating Schools and Other Neighborhood Services: Public Opinion

Residents are more likely to judge schools adequate than other neighborhood services. Yet one-fourth of the residents who find the schools unsatisfactory want to move because of their dissatisfaction.



NCES

Table 1.3
Confidence of the public in people running institutions in the United States: 1973 to 1977

Year and institution	Percentage distribution of responses					
	Total	A great deal	Only some	Hardly any	Don't know	No answer
1973						
Education	100.0	36.8	53.1	8.2	1.4	0.6
Executive branch, Federal Government	100.0	29.2	50.2	18.3	1.9	0.4
Congress	100.0	23.4	58.7	14.8	2.6	0.5
Major companies	100.0	29.2	53.1	10.8	6.6	0.3
Medicine	100.0	53.8	39.0	5.7	0.9	0.5
Press	100.0	23.0	60.6	14.6	1.5	0.3
1974						
Education	100.0	49.0	41.2	8.2	1.3	0.3
Executive branch, Federal Government	100.0	13.6	42.5	41.6	2.2	0.1
Congress	100.0	17.0	58.9	20.8	3.0	0.2
Major companies	100.0	31.3	50.5	14.5	3.6	0.1
Medicine	100.0	60.3	33.6	4.4	1.5	0.1
Press	100.0	25.8	55.3	17.4	1.2	0.2
1975						
Education	100.0	30.9	54.5	12.8	1.7	0.1
Executive branch, Federal Government	100.0	13.3	54.6	29.5	2.6	0.1
Congress	100.0	13.3	58.5	25.1	2.9	0.2
Major companies	100.0	19.2	53.8	21.1	5.5	0.5
Medicine	100.0	50.4	40.1	7.9	1.5	0.2
Press	100.0	23.8	55.2	17.8	2.8	0.4
1976						
Education	100.0	37.2	44.8	15.3	2.0	0.7
Executive branch, Federal Government	100.0	13.4	58.3	25.0	3.0	0.3
Congress	100.0	13.7	58.0	25.4	2.6	0.3
Major companies	100.0	21.9	51.0	21.6	5.0	0.5
Medicine	100.0	53.8	35.2	9.2	1.3	0.5
Press	100.0	28.3	51.8	17.6	1.8	0.6
1977						
Education	100.0	40.5	49.5	8.8	0.9	0.3
Executive branch, Federal Government	100.0	27.8	54.2	14.4	3.1	0.3
Congress	100.0	19.0	60.6	17.1	2.9	0.5
Major companies	100.0	27.1	56.3	12.3	4.0	0.3
Medicine	100.0	51.4	41.1	6.1	1.1	0.3
Press	100.0	25.0	57.1	15.4	2.2	0.3

NOTE: Details may not add to totals because of rounding.

SOURCE: National Opinion Research Center, University of Chicago, General Social Survey.

Chart 1.3
Confidence in the People Running Institutions: Public Opinion

Since 1975 confidence in educational leaders has grown along with general support for people running other institutions. Educational leaders rank only below medical leaders in public confidence.

"I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"

Percent of respondents expressing "a great deal of confidence"

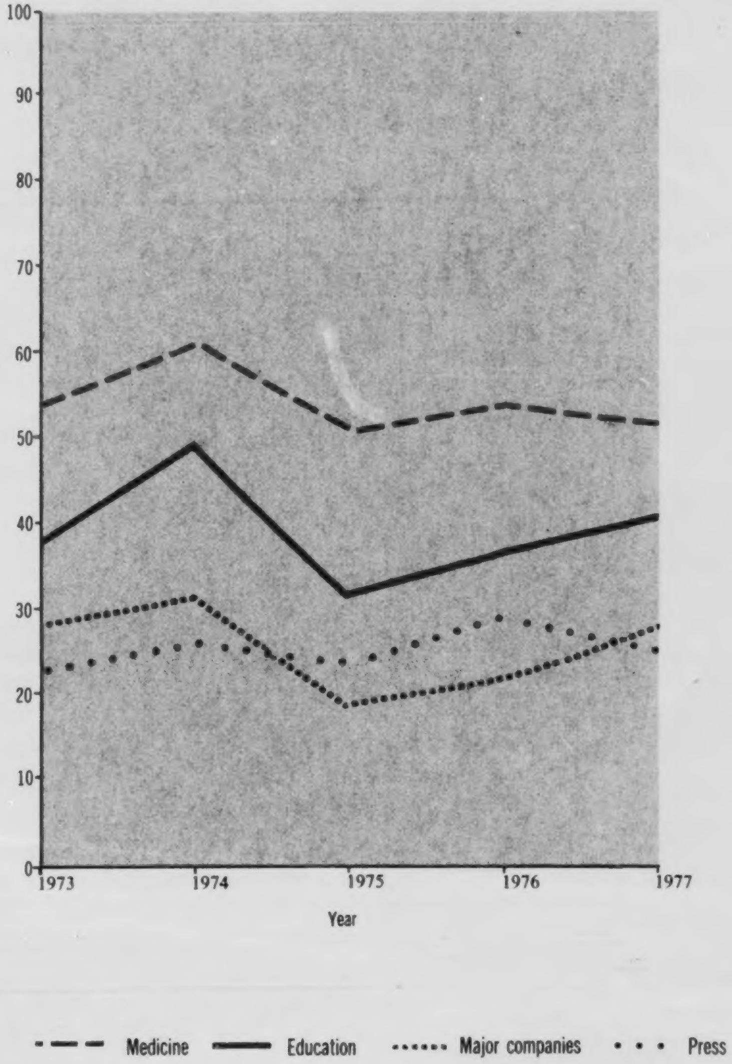


Table 1.4
Employment status of population[1] not enrolled in school, 16 to 24 years old, by age, sex, racial/ethnic group, and educational attainment: October 1976

Characteristic	Total population	Labor force				
		Number	Percent of total population	Employed	Unemployed	
					Number	Percent of labor force
	(Numbers in thousands)					
TOTAL	19,674	15,548	79.0	13,384	2,162	13.9
16- to 19-year-olds	5,282	3,980	75.4	3,192	786	19.7
20- to 24-year-olds	14,392	11,568	80.4	10,192	1,376	11.9
Men	9,145	8,423	92.1	7,327	1,095	13.0
Women	10,529	7,124	67.7	6,056	1,068	15.0
White	16,939	13,675	80.7	11,993	1,678	12.3
High school dropouts	3,995	2,687	67.3	2,088	599	22.3
High school graduates, no college	9.044	7,481	82.7	6,674	807	10.8
College, 1 to 3 years	2,548	2,220	87.1	2,037	183	8.2
College graduates	1,353	1,290	95.3	1,198	92	7.1
Black	2,420	1,635	67.6	1,191	444	27.2
High school dropouts	912	496	54.4	312	184	37.1
High school graduates, no college	1,138	823	72.3	629	194	23.6
College, 1 to 3 years	281	232	82.6	169	63	27.2
College graduates	89	83	92.3	80	3	3.6
Spanish origin[2]	1,213	837	69.0	703	132	15.8
High school dropouts	645	394	61.1	308	86	21.8
High school graduates, no college	456	348	76.3	313	35	10.1
College, 1 to 3 years	96	83	86.5	71	12	14.5
College graduates	16	11	([3])	11	([3])	([3])
Mexican	825	571	69.2	474	94	16.5
Puerto Rican	159	90	56.6	66	24	26.7
Other Spanish origin	230	175	76.1	163	15	8.6

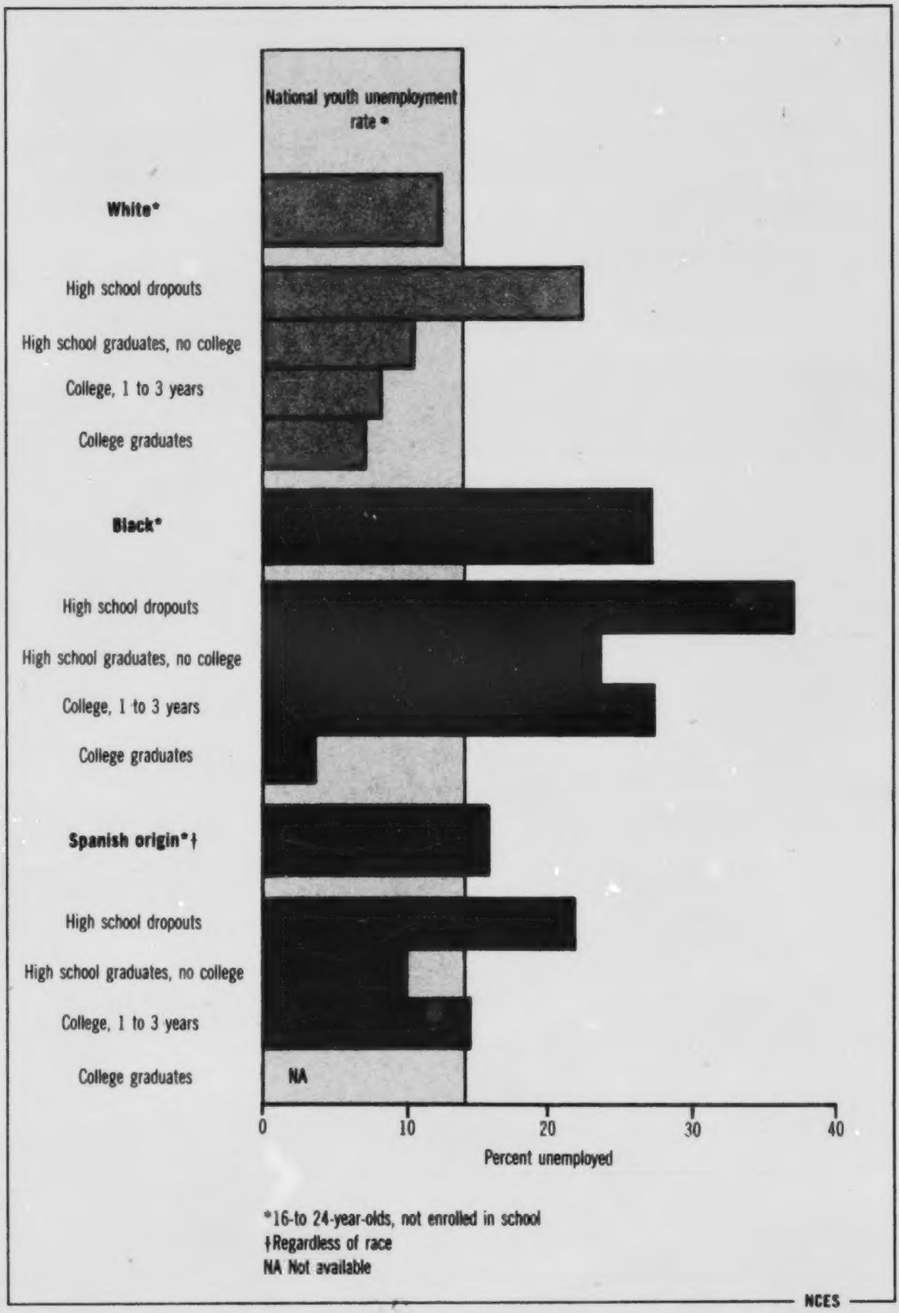
[1] Civilian noninstitutional population.
[2] Regardless of race.
[3] Base less than 75,000.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Report 200, *Students, Graduates and Dropouts in the Labor Market, October 1976*, and unpublished data.

Chart 1.4
Youth Unemployment by Educational Attainment

White and Hispanic youths who complete high school have unemployment rates below the national average for youth. Among black youths, only those who complete college have rates below the national average.



*16-to 24-year-olds, not enrolled in school
†Regardless of race
NA Not available

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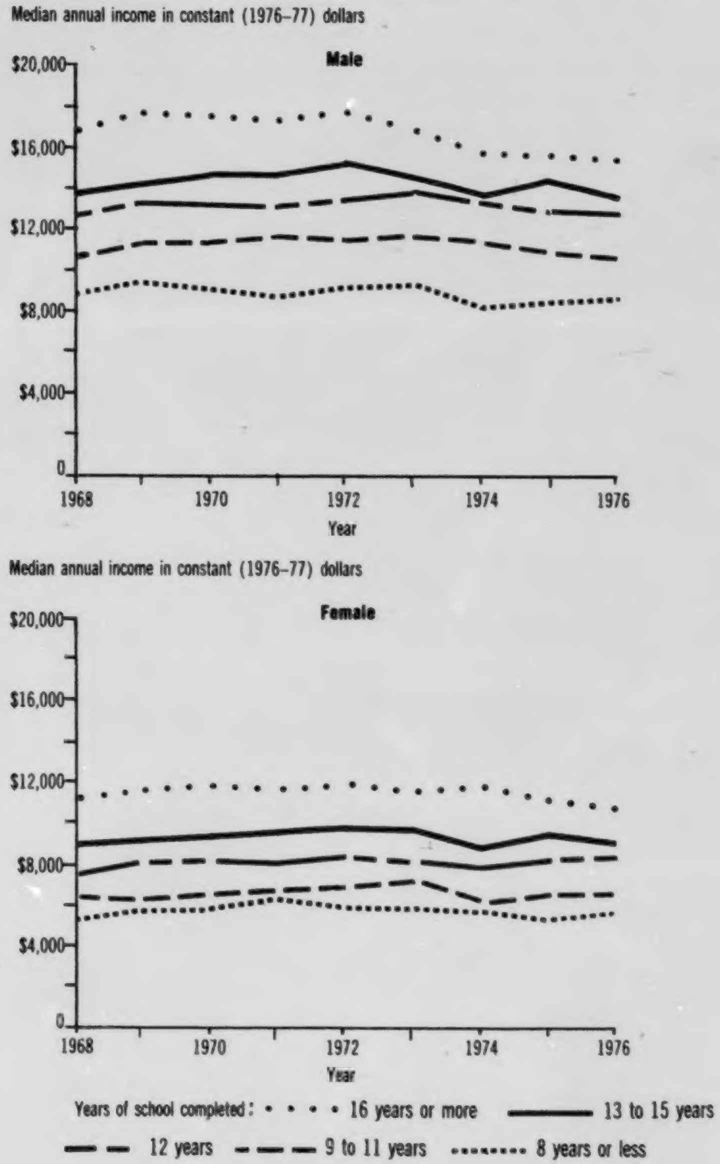
Table 1.5
Income of year-round full-time workers, 25 to 34 years old, by educational attainment: 1968 to 1976

Sex and years of school completed	1968	1969	1970	1971	1972	1973	1974	1975	1976
	Median income in current dollars								
MALE TOTAL	$7,841	$8,678	$9,126	$9,485	$10,329	$11,325	$12,037	$12,777	$13,240
8 years or less	5,413	6,064	6,094	6,135	6,820	7,472	7,341	8,047	8,769
9 to 11 years	6,596	7,237	7,635	7,994	8,378	9,295	9,954	10,241	10,557
12 years	7,762	8,493	8,817	9,173	9,907	11,054	11,680	12,146	12,642
13 to 15 years	8,409	9,229	9,920	10,311	11,024	11,536	12,302	13,439	13,590
16 years or more	10,298	11,432	11,887	12,103	12,938	13,477	13,878	14,651	15,354
FEMALE TOTAL	4,935	5,352	5,923	6,175	6,706	7,086	7,604	8,401	8,939
8 years or less	3,283	3,590	3,777	4,280	4,349	4,696	5,111	5,057	5,728
9 to 11 years	3,771	4,008	4,415	4,589	5,016	5,657	5,419	6,144	6,682
12 years	4,769	5,158	5,584	5,727	6,149	6,393	7,001	7,685	8,178
13 to 15 years	5,493	5,880	6,256	6,679	7,095	7,563	7,827	8,639	9,108
16 years or more	6,865	7,433	8,116	8,242	8,706	9,180	9,539	10,445	10,833
	Median income in constant (1976–77) dollars								
MALE TOTAL	$12,905	$13,484	$13,485	$13,528	$14,159	$14,250	$13,638	$13,518	$13,240
8 years or less	**8,909**	**9,422**	**9,004**	**8,750**	**9,349**	**9,402**	**8,317**	**8,514**	**8,769**
9 to 11 years	**10,856**	**11,245**	**11,281**	**11,401**	**11,485**	**11,696**	**11,278**	**10,835**	**10,557**
12 years	**12,775**	**13,196**	**13,028**	**13,083**	**13,581**	**13,909**	**13,233**	**12,850**	**12,642**
13 to 15 years	**13,840**	**14,340**	**14,658**	**14,706**	**15,112**	**14,516**	**13,938**	**14,218**	**13,590**
16 years or more	**16,948**	**17,763**	**17,564**	**17,261**	**17,735**	**16,958**	**15,724**	**15,501**	**15,354**
FEMALE TOTAL	8,122	8,316	8,752	8,807	9,193	8,916	8,615	8,888	8,939
8 years or less	**5,403**	**5,578**	**5,581**	**6,104**	**5,962**	**5,909**	**5,791**	**5,350**	**5,728**
9 to 11 years	**6,206**	**6,228**	**6,524**	**6,545**	**6,876**	**7,118**	**6,140**	**6,500**	**6,682**
12 years	**7,849**	**8,015**	**8,251**	**8,168**	**8,429**	**8,044**	**7,932**	**8,131**	**8,178**
13 to 15 years	**9,040**	**9,136**	**9,244**	**9,526**	**9,726**	**9,517**	**8,868**	**9,140**	**9,108**
16 years or more	**11,298**	**11,549**	**11,992**	**11,755**	**11,934**	**11,551**	**10,808**	**11,051**	**10,833**

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, *Money Income of Families and Persons in the United States*, P–60, Nos. 60, 66, 75, 80, 85, 90, 97, 101, 103, 105.

Chart 1.5
Income of Young Workers*

Although the earnings gap has narrowed slightly, earning power is strongly associated with higher educational attainment. High school graduates earn annually at least 40 percent more than their counterparts with no high school education. College graduates command more than a $1,000 earnings advantage over workers who attended college but did not graduate. However, female college graduates in the labor force continue to earn appreciably less than males with only a high school education.



*Year-round full-time workers, 25 to 34 years old

Table 1.6

Annual cross-sectional regression analyses of the association between son's earnings and his number of years of education, his parent's income about the time he graduated from high school, and his mental ability [1], among male 1957 Wisconsin high school graduates [2]: 1965 to 1971 [3]

	Regression results: Criterion variable is son's annual earnings (in logarithms)		
	Antecedent variables		
Item	Education	Parental income	Mental ability (I.Q.)
Year	Regression coefficients (× 100)		
1965	0.02	4.89	0.11
1966	2.65	4.69	0.90
1967	3.22	4.20	1.94
1968	4.16	5.27	2.63
1969	6.19	4.43	3.81
1970	8.72	4.02	3.89
1971	10.43	4.19	3.51
Mean	13.59 years	$11,940	101.2 I.Q. points
Standard deviation	1.99 years	$6,240	15.0 I.Q. points

[1] The procedures used in the regression analyses also controlled for father's and mother's education, father's occupation, and farm background. Also earnings and parental income were adjusted for price and productivity differences between 1972 and the reporting year.

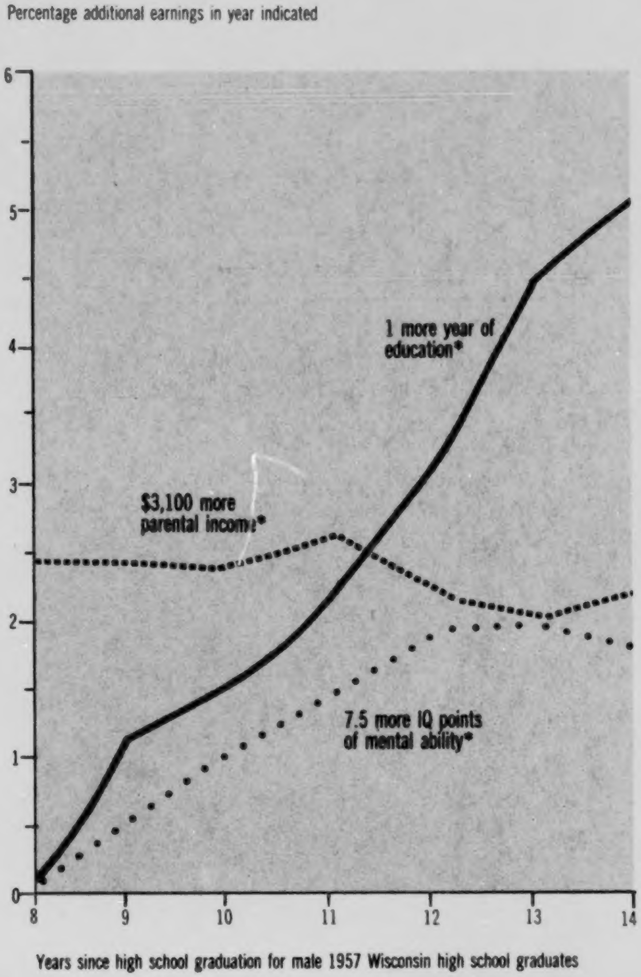
[2] Included were those male 1957 Wisconsin high school graduates who were not farmers in 1964 and had earnings above $3,000 in the reporting year.

[3] In the chart the regression coefficients of son's years of education, parental income, and mental ability associated with his logarithm of earnings have been interpreted as percentage changes (associated with changes of one-half standard deviation in the variables) since $e^x \simeq 1 + x$ where x is about .11 or less.

SOURCE: Robert M. Hauser and Thomas N. Daymont, "Schooling, Ability, and Earnings: Cross-sectional Findings 8 to 14 Years After High School Graduation", *Sociology of Education*, 50 (1977), 182–205, and unpublished tabulations.

Chart 1.6
Percentage Additional Earnings Uniquely Associated With More Education, More Parental Income, and More Mental Ability

A son's earnings are associated with his number of years of education, his parent's income about the time he graduated from high school, and his mental ability. Although an increase in the amount of each of these factors is uniquely associated with an increase in his earnings, an additional year of education adds increasingly more to a young man's earnings the longer he has been out of high school.



*Than the mean for male 1957 Wisconsin high school graduates.

Table 1.7
Occupational distribution of employed persons, by educational attainment and sex: March 1976

Sex and occupation	Total employed [1]	Distribution by years of school completed				
		8 years or less [2]	9 to 11 years	12 years	13 to 15 years	16 years or more
MALE						
Number (in thousands)	50,924	6,112	8,152	18,548	8,308	9,803
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White collar:	**42.0**	**11.8**	**17.2**	**31.7**	**55.4**	**89.8**
Professional, technical, and kindred workers	15.4	0.9	1.8	5.7	16.3	53.3
Managers and administrators, except farm	14.2	6.6	6.6	12.8	20.0	23.0
Sales workers	6.1	1.6	4.1	5.4	9.8	8.8
Clerical and kindred workers	6.3	2.7	4.7	7.8	9.3	4.7
Blue collar:	**44.6**	**64.4**	**62.4**	**56.1**	**32.4**	**6.4**
Craft and kindred workers	20.5	23.6	24.0	28.0	17.8	3.8
Operatives, except transport	11.3	19.1	16.4	13.9	6.9	1.2
Transport equipment operatives	5.7	9.5	9.3	6.9	3.0	0.6
Laborers, except farm	7.1	12.2	12.7	7.3	4.7	0.8
Service workers, including private household	**9.1**	**11.6**	**15.1**	**8.5**	**10.0**	**2.5**
Farm workers	**4.2**	**12.3**	**5.3**	**3.7**	**2.1**	**1.3**
FEMALE						
Number (in thousands)	34,609	2,837	5,580	15,432	5,637	5,123
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White collar:	**63.6**	**16.2**	**33.0**	**67.0**	**80.0**	**94.5**
Professional, technical, and kindred workers	16.2	0.8	2.3	6.0	18.7	67.8
Managers and administrators, except farm	5.7	2.8	3.4	5.9	7.0	7.9
Sales workers	6.6	4.6	8.2	7.2	7.6	2.8
Clerical and kindred workers	35.1	8.0	19.1	47.9	46.7	16.0
Blue collar:	**14.5**	**38.1**	**26.8**	**13.4**	**5.0**	**1.9**
Craft and kindred workers	1.4	1.6	2.2	1.6	1.1	0.4
Operatives, except transport	11.4	33.8	21.1	10.2	2.9	1.2
Transport equipment operatives	0.6	0.5	1.2	0.7	0.4	0.1
Laborers, except farm	1.1	2.2	2.3	0.9	0.6	0.2
Service workers, including private household	**21.0**	**42.9**	**38.9**	**18.8**	**14.4**	**3.5**
Farm workers	**0.9**	**2.6**	**1.3**	**0.8**	**0.5**	**0.3**

[1] Includes all employed persons, 16 years old and over.

[2] Includes persons reporting no school years completed.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Report 193, *Educational Attainment of Workers*, March 1976.

Chart 1.7
Occupational Distribution by Sex and Educational Attainment

Greater education attainment is strongly associated with movement upward in occupational rank. Male workers without a high school education are more likely to be in manual work, female workers in service work.

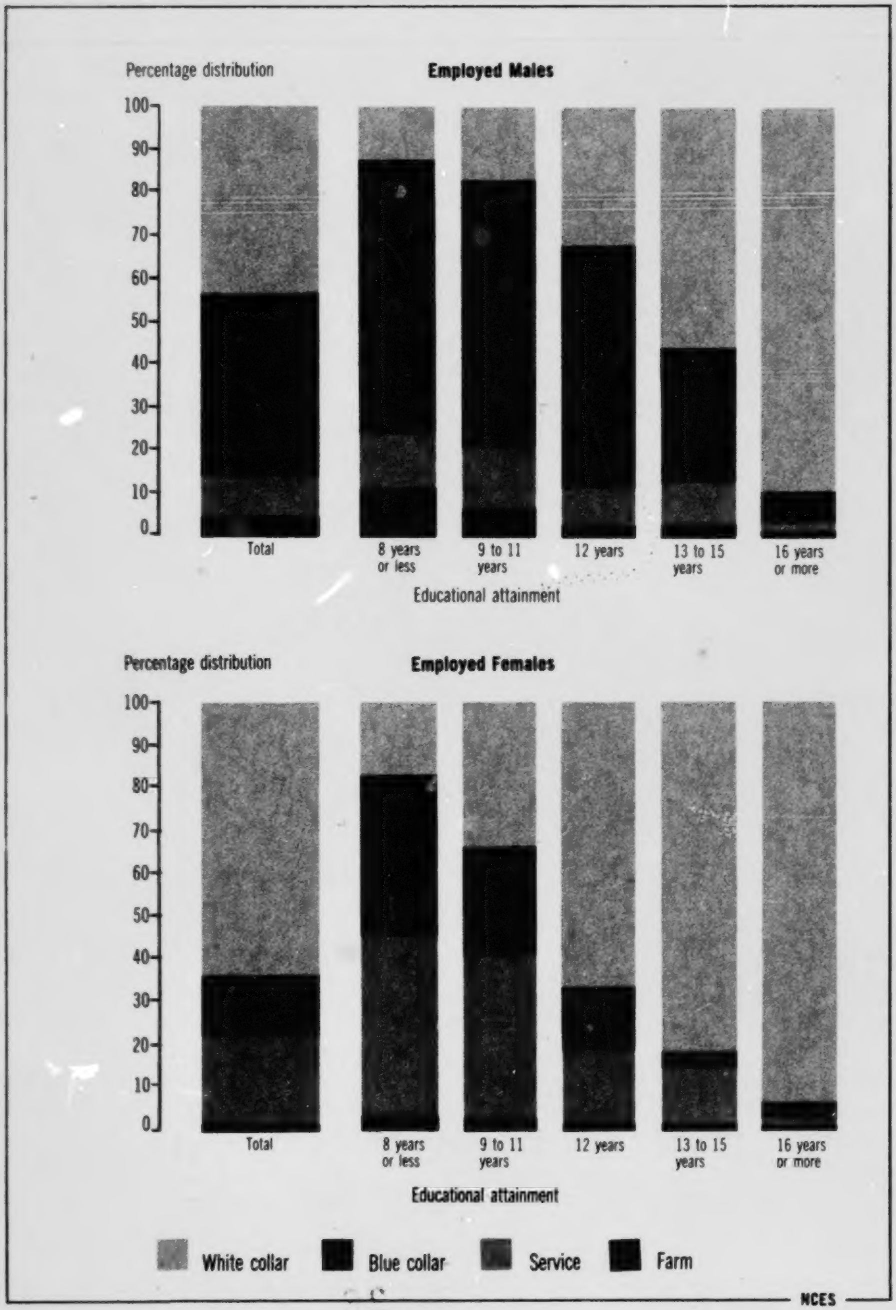


Table 1.8
Percent of persons, 25 years old and over, completing 4 years of high school or more, by age and racial/ethnic origin: March 1977

Racial/ethnic origin	Total	Percent by age group					
		25 to 29	30 to 34	35 to 44	45 to 54	55 to 64	65 and over
Total	64.9	85.4	81.0	73.6	64.3	56.2	37.5
White	67.0	**86.8**	**82.6**	**75.8**	**67.5**	**59.3**	**39.7**
Black	45.5	**74.5**	**67.2**	**55.6**	**35.6**	**26.1**	**14.8**
Spanish origin*	39.6	**58.1**	**49.0**	**41.0**	**33.0**	**22.6**	**16.2**

* Regardless of race.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Educational Attainment in the United States: March 1977 and 1976*, Series P-20, No. 314.

Chart 1.8
High School Graduates by Age Group

The proportion of high school graduates in the population more than doubles from the oldest to the youngest age group. Disparities between racial/ethnic groups diminish appreciably among the younger adults.

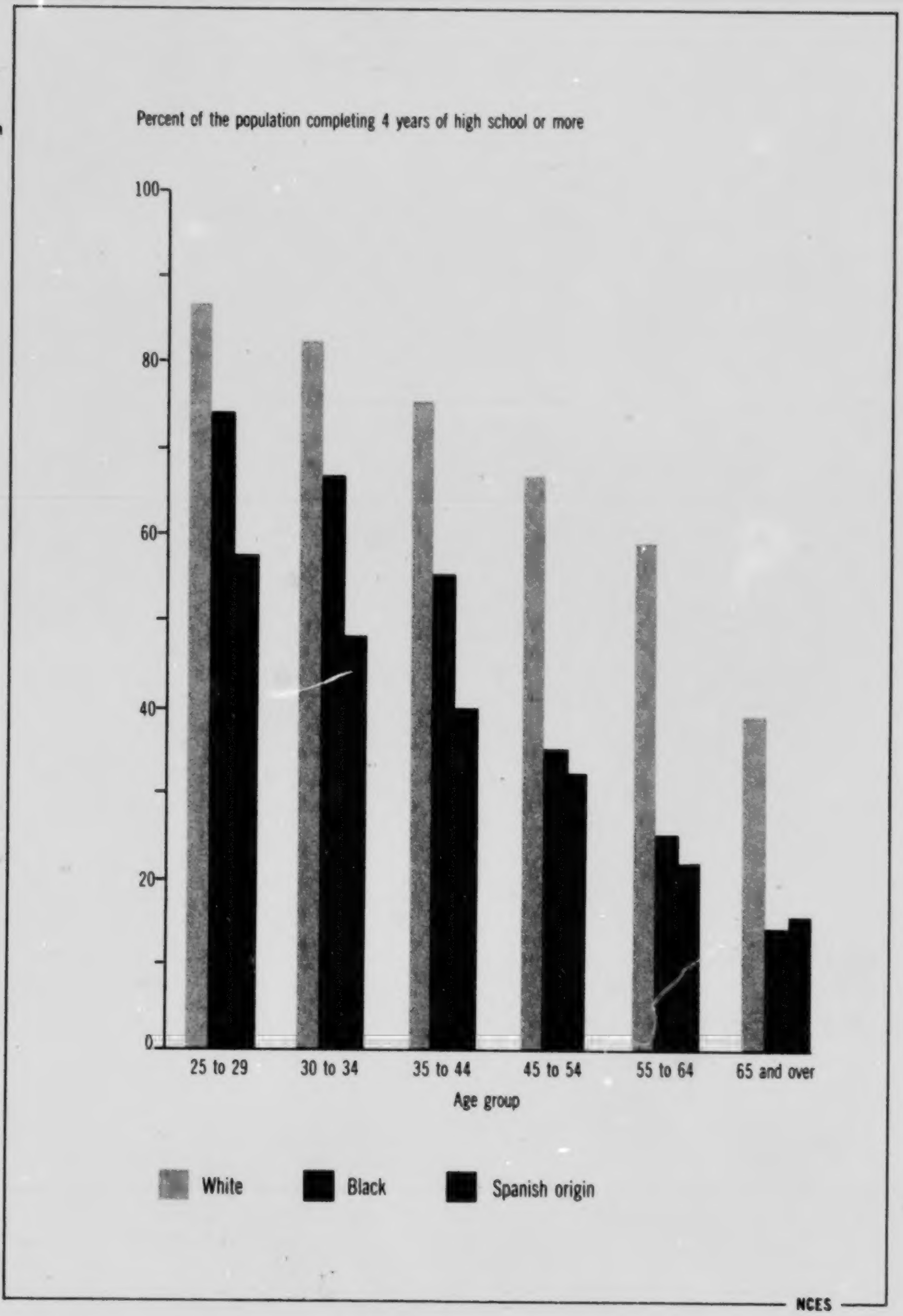


Table 1.9
Civilian labor force participation rates of persons, 16 years old and over [1] by sex, and by maternal status of females: 1940 to 1976

Year	Percent in civilian labor force		
	Males	Females	Mothers [2]
1940	83.7	28.2	8.6
1946	82.6	31.2	18.2
1948	86.6	32.7	20.2
1950	86.4	33.9	21.6
1952	86.3	34.7	23.8
1954	85.5	34.6	25.6
1956	85.5	36.9	27.5
1958	84.2	37.1	29.5
1960	83.3	37.7	30.4
1962	82.0	37.9	32.9
1964	81.0	38.7	34.5
1966	80.4	40.3	35.8
1968	80.1	41.6	39.4
1970	79.7	43.3	42.0
1972	79.0	43.9	42.9
1974	78.7	45.6	45.7
1976	77.5	47.3	48.8

[1] Includes all persons 14 years and over in 1940 and 1946 and mothers, 14 years and over prior to 1968.

[2] Females, ever married with children under 18 years old.

NOTE: Annual rate reported for males and females; March data reported for mothers except for 1946 to 1954, which are April data.

SOURCE: U.S. Department of Labor, Employment Standards Administration, Women's Bureau, *Working Mothers and Their Children*, September 1977; Employment and Training Administration, *Employment and Training Report of the President*, 1977.

Chart 1.9
Civilian Labor Force Participation Rates

Civilian labor force participation rates for females have risen appreciably over the last quarter of a century. The most rapid expansion in labor force participation in recent years has been experienced by mothers.

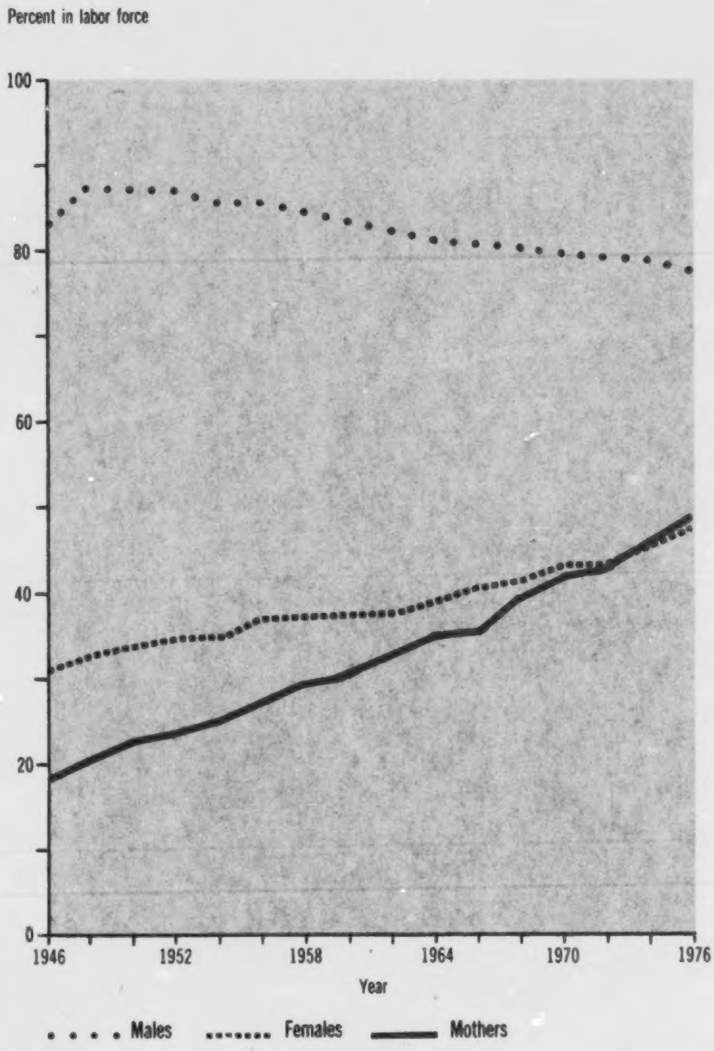


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Table 1.10
Children, 17 years old or under, by labor force status of mother: 1970 to 1977

Characteristic	Year							
	1970	1971	1972	1973	1974	1975	1976	1977[1]
	(Numbers in thousands)							
Children, 17 years old or under, with mother present	65,094	64,928	64,549	63,582	62,802	61,832	60,987	59,777
Mother in labor force	25,544	25,451	25,762	26,189	26,768	27,619	28,159	28,892
Mother not in labor force	39,550	39,477	38,787	37,393	36,034	34,213	32,828	30,885
Children, under 6 years old, with mother present	19,513	19,185	19,150	19,054	18,409	18,020	17,559	17,013
Mother in labor force	5,590	5,434	5,607	5,952	6,086	6,539	6,439	6,431
Mother not in labor force	13,923	13,751	13,543	13,102	12,323	11,481	11,120	10,582
Children, 6 to 17 years old, with mother present	**45,581**	**45,743**	**45,399**	**44,528**	**44,393**	**43,813**	**43,428**	**42,765**
Mother in labor force	**19,954**	**20,017**	**20,155**	**20,237**	**20,682**	**21,081**	**21,720**	**22,462**
Mother not in labor force	**25,627**	**25,726**	**25,244**	**24,291**	**23,711**	**22,732**	**21,708**	**20,304**
	Percentage distribution							
Children, 17 years old or under, with mother present	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mother in labor force	39.2	39.2	39.9	41.2	42.6	44.7	46.2	48.3
Mother not in labor force	60.8	60.8	60.1	58.8	57.4	55.3	53.8	51.7
Children, under 6 years old, with mother present	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mother in labor force	28.6	28.3	29.3	31.2	33.1	36.3	36.7	37.8
Mother not in labor force	71.4	71.7	70.7	68.8	66.9	63.7	63.3	62.2
Children, 6 to 17 years old, with mother present	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Mother in labor force	**43.8**	**43.8**	**44.4**	**45.4**	**46.6**	**48.1**	**50.0**	**52.5**
Mother not in labor force	**56.2**	**56.2**	**55.6**	**54.6**	**53.4**	**51.9**	**50.0**	**47.5**

[1] Preliminary data.

NOTE: Details may not add to totals because of rounding.

SOURCE: Department of Labor, Bureau of Labor Statistics, Special Labor Force Reports.

Chart 1.10
School-Age Children with Working Mothers

Despite declines in the size of the school-age population, both the proportion and number of 6- to 17-year-olds with working mothers have risen over the last 7 years.

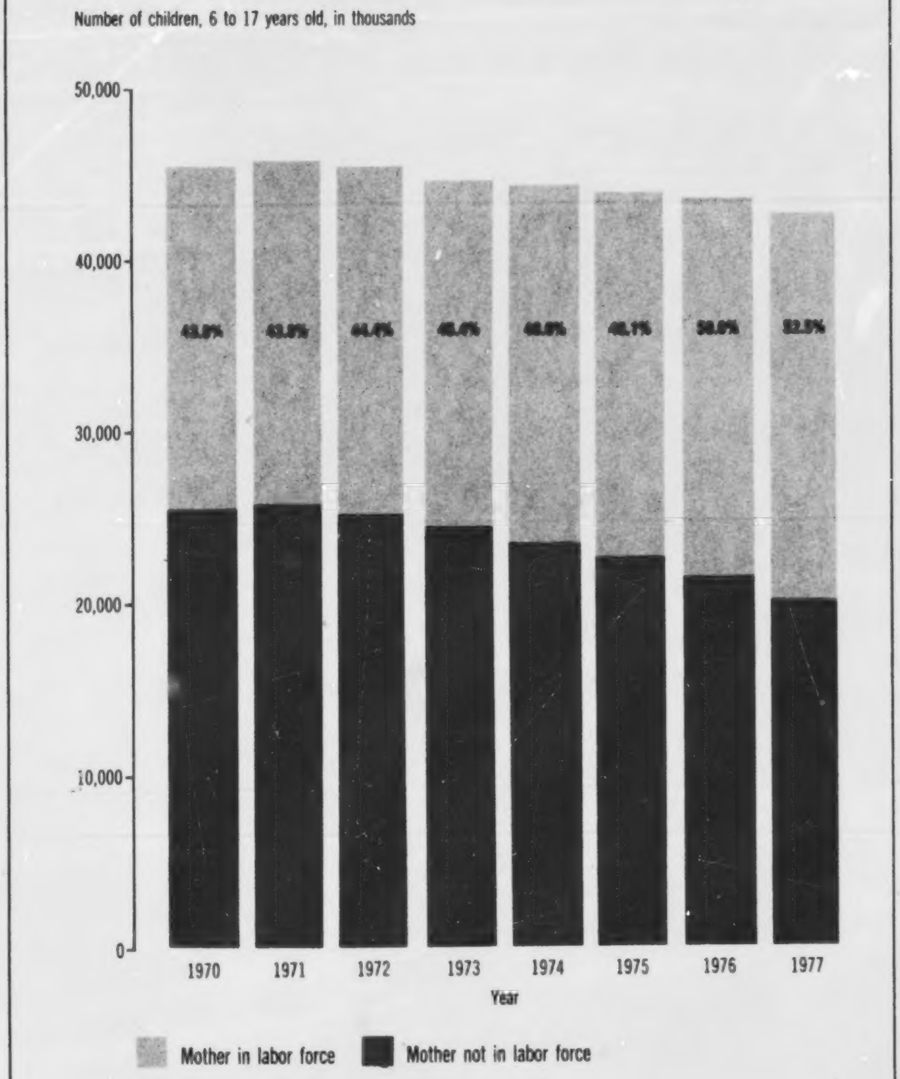

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Table 1.11
Percentage distribution of employed college graduates: Selected years, 1966 to 1976

Item	1966	1968	1970	1972[1]	1974	1976
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
White-collar (non-farm) workers	95.1	95.2	95.2	93.4	91.8	91.4
Professional, technical, and kindred	65.9	67.0	67.0	61.5	58.9	58.2
Managers, officials, and proprietors	17.1	16.9	16.6	17.9	18.8	17.8
Clerical and sales workers	12.1	11.3	11.6	14.0	14.1	15.4
Blue-collar and farm workers	4.8	4.8	4.8	6.5	8.1	8.7
Craftsmen, operatives, and non-farm laborers	2.9	2.9	3.1	3.7	4.6	4.9
Private household, service, and farm workers	1.9	1.9	1.7	2.8	3.5	3.8

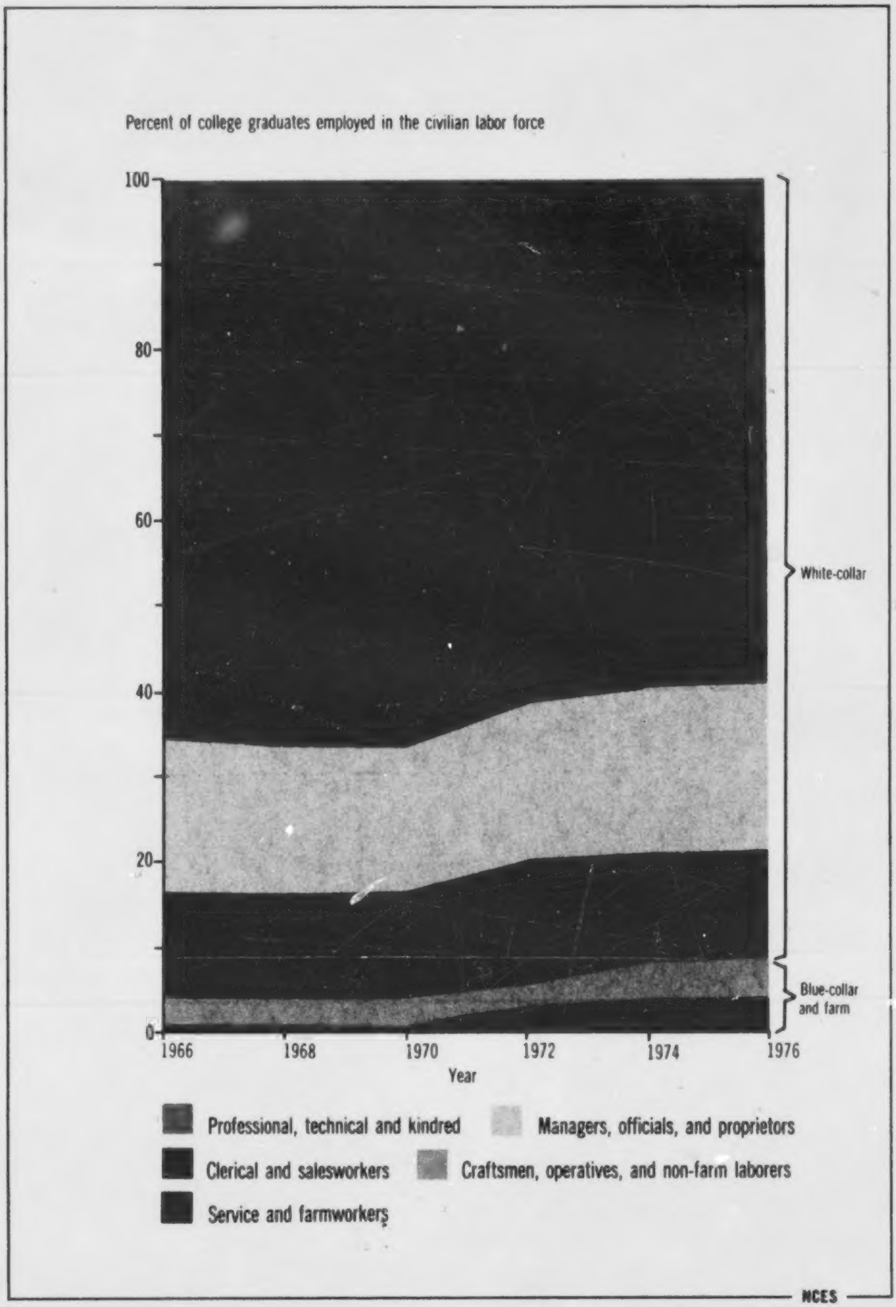
[1] Prior to 1972, data were collected for the employed civilian noninstitutional population, 18 years old and over. Since 1972, data have been collected for the employed civilian noninstitutional population, 16 years old and over.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Reports, various years.

Chart 1.11
Occupational Distribution of College Graduates

Although a college education serves as a prerequisite for the professions, it does not guarantee professional employment. Since 1966 the proportion of young college graduates in professional occupations has declined. The proportion in clerical, sales, and blue collar occupations experienced a corresponding increase.



NCES

Table 1.12
Estimated population[1] of selected age groups, by race: 1950 to 1980

Age group	Year							Percent change			
								Actual		Estimated	
	1950	1955	1960	1965	1970	1976	1980[2]	1950 to 1976	1970 to 1976	1950 to 1980	1976 to 1980
	(Numbers in thousands)										
TOTAL											
5 to 13 years old	22,424	27,924	32,965	35,574	36,636	32,955	30,197	+ 47.0	− 10.0	+ 34.7	− 8.4
14 to 17 years old	8,444	9,247	11,219	14,153	15,910	16,897	15,573	+ 100.1	+ 6.2	+ 86.6	− 6.8
18 to 24 years old	16,075	14,968	16,128	20,293	24,687	28,166	29,462	+ 75.2	+ 14.1	+ 83.3	+ 4.6
25 to 34 years old	24,036	24,283	22,919	22,465	25,294	32,044	36,172	+ 33.3	+ 26.7	+ 50.5	+ 12.9
White											
5 to 13 years old	19,570	24,413	28,533	30,628	31,122	27,525	24,878	+ 40.6	− 11.6	+ 27.1	− 9.6
14 to 17 years old	7,370	8,058	9,838	12,271	13,618	14,256	13,122	+ 93.4	+ 4.7	+ 78.0	− 8.0
18 to 24 years old	14,186	13,124	14,169	17,882	21,511	24,110	24,964	+ 70.0	+ 12.1	+ 76.0	+ 3.5
25 to 34 years old	21,471	21,620	20,230	19,709	22,167	27,934	31,254	+ 30.1	+ 26.0	+ 45.6	+ 11.9
Black and other races											
5 to 13 years old	2,854	3,511	4,432	5,125	5,513	5,430	5,319	+ 90.3	− 1.5	+ 86.4	− 2.0
14 to 17 years old	1,074	1,189	1,380	1,883	2,292	2,641	2,641	+ 145.9	+ 15.2	+ 145.9	± 0.0
18 to 24 years old	1,889	1,844	1,959	2,410	3,176	4,056	4,499	+ 114.7	+ 27.7	+ 138.2	+ 10.9
25 to 34 years old	2,565	2,663	2,688	2,754	3,125	4,110	4,919	+ 60.2	+ 31.5	+ 91.8	+ 19.7

[1] Total population including armed forces overseas. Alaska and Hawaii are included for all years.
[2] Census Series II projections.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Population Estimates and Projections*, Series P-25, Nos. 310, 311, 519, 614, 704.

Chart 1.12
Population Size of School-Age Groups

As the size of the elementary school-age population continues to decrease, the secondary school-age group begins its decline. The traditional pool of postsecondary education participants, the 18- to 24-year-old group, will soon level off while the number of older potential participants will continue to rise.

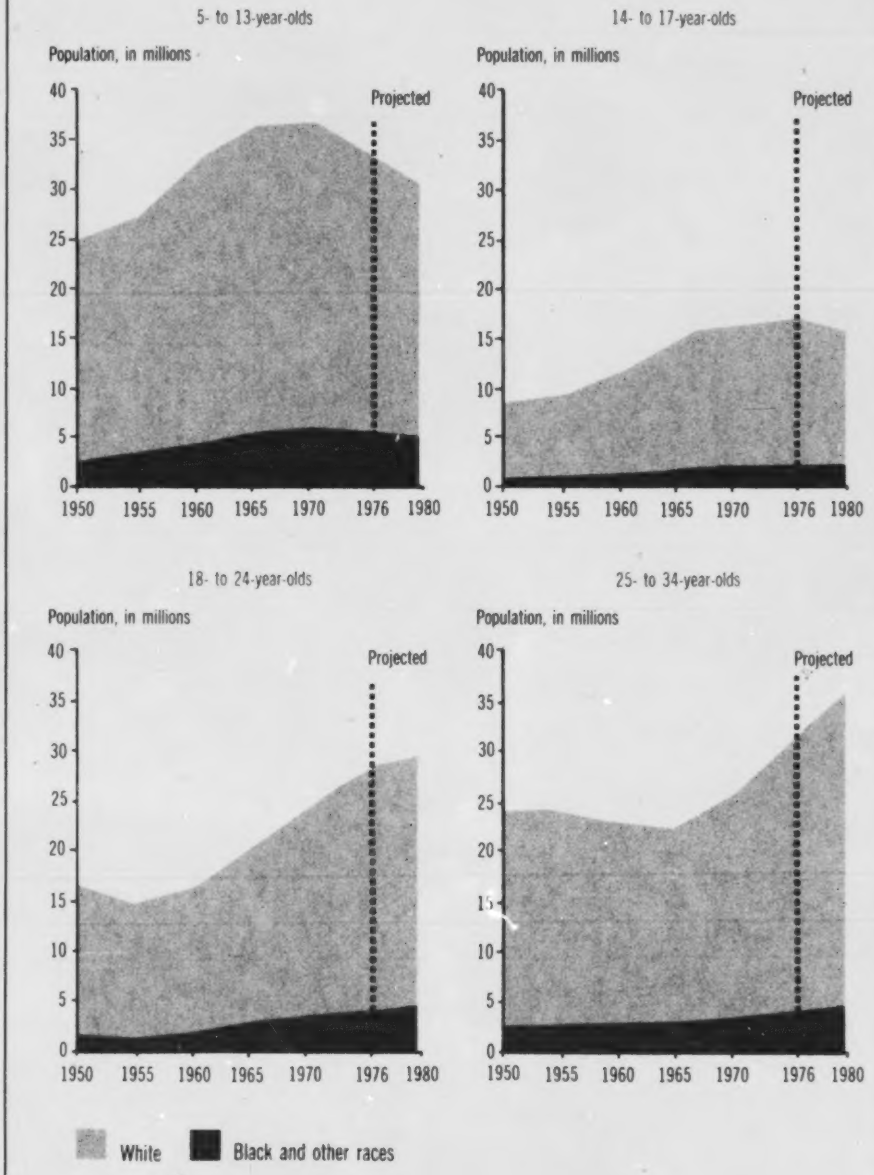


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Table 1.13
Estimated net migration of the 5- to 17-year-old population:[1] April 1, 1970 to July 1, 1975

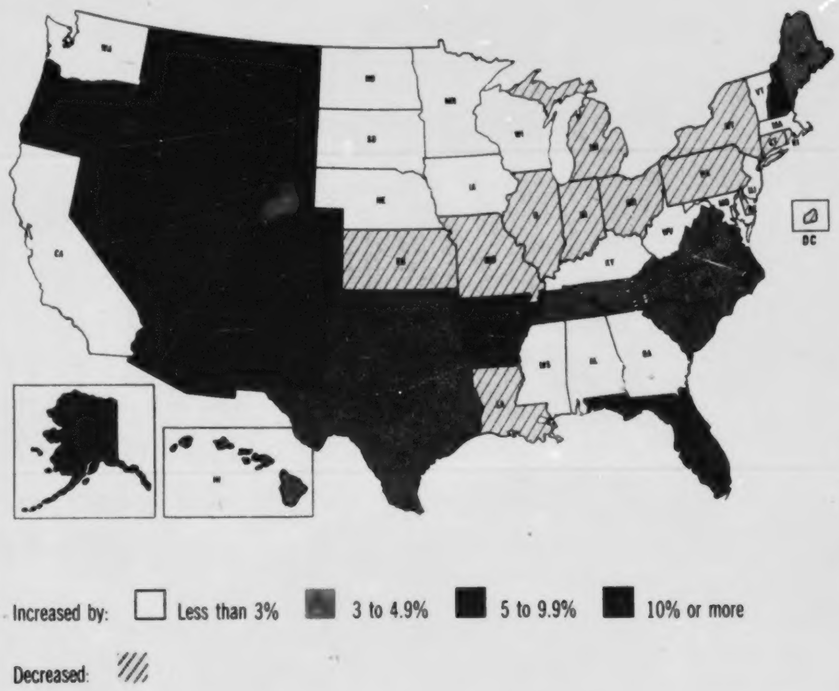
State or area	Net change due to migration,[2] 1970 to 1975	Percent change
Alabama	13,200	1.4
Alaska	7,500	8.5
Arizona	83,500	17.2
Arkansas	37,200	7.5
California	93,900	1.9
Colorado	55,000	9.4
Connecticut	−800	−0.1
Delaware	−200	−0.1
Dist. of Columbia	−14,900	−9.1
Florida	273,700	17.0
Georgia	29,400	2.4
Hawaii	6,300	3.1
Idaho	21,100	10.6
Illinois	−66,400	−2.3
Indiana	−16,000	−1.2
Iowa	7,100	1.0
Kansas	−7,800	−1.4
Kentucky	24,300	2.9
Louisiana	−500	−0.1
Maine	12,100	4.7
Maryland	10,900	1.1
Massachusetts	15,400	1.1
Michigan	−7,100	−0.3
Minnesota	1,400	0.1
Mississippi	11,300	1.8
Missouri	−2,400	−0.2
Montana	11,300	5.8
Nebraska	7,800	2.0
Nevada	19,600	15.5
New Hampshire	13,400	7.1
New Jersey	18,100	1.0
New Mexico	17,900	5.8
New York	−71,700	−1.6
North Carolina	41,600	3.1
North Dakota	1,700	1.0
Ohio	−59,800	−2.1
Oklahoma	24,000	3.8
Oregon	39,100	7.3
Pennsylvania	−12,600	−0.4
Rhode Island	−3,200	−1.4
South Carolina	29,400	4.1
South Dakota	1,500	0.8
Tennessee	36,600	3.6
Texas	110,100	3.7
Utah	12,600	4.0
Vermont	2,400	2.0
Virginia	39,900	3.3
Washington	19,900	2.3
West Virginia	9,500	2.2
Wisconsin	25,200	2.1
Wyoming	6,900	7.5

[1] Excludes movement of Armed Forces members.
[2] Numbers rounded to nearest hundred.

SOURCE: U.S. Department of Commerce, Bureau of the Census, unpublished data.

Chart 1.13
Change in 5- to 17-Year-Old Population Due to Migration: 1970 to 1975

Some Mid-Atlantic and North Central States have experienced the impact of population declines more sharply because of out-migration. The national decline of the school-age population has been offset in Florida and in some Western Mountain States by the influx of new residents.


DC
Increased by:
Less than 3%
3 to 4.9%
5 to 9.9%
10% or more
Decreased:

NCES

Table 1.14
Children, 5 to 17 years old, in families below the poverty level and poverty rates: 1970 and 1975

Region and State	Poor children, 5 to 17 years old		Poverty rate		Change in poverty rate from 1970: Increase: +, Decrease: –
	1970	1975	1970	1975	
United States	7,700,368	7,132,000	14.8	14.5	–*
Northeast	1,247,028	1,330,110	10.5	12.0	+*
New England	260,121	283,270	8.9	10.1	+
Maine	36,308	38,690	14.2	15.3	+
New Hampshire	14,286	20,310	7.7	10.3	+*
Vermont	13,062	20,020	11.4	17.8	+*
Massachusetts	116,900	123,540	8.4	9.3	+
Rhode Island	24,482	21,520	11.0	10.5	–
Connecticut	55,083	59,190	7.2	8.4	+
Middle Atlantic	986,907	1,046,840	11.0	12.7	+
New York	526,402	524,020	12.2	13.1	+
New Jersey	155,690	193,800	8.7	11.6	+*
Pennsylvania	304,815	329,020	10.6	12.6	+
North Central	1,539,350	1,576,880	10.4	11.6	+
East North Central	1,023,717	1,160,900	9.7	12.0	+*
Ohio	273,542	293,650	9.8	11.6	+
Indiana	123,484	120,440	9.0	9.6	+
Illinois	302,311	389,150	10.7	15.1	+*
Michigan	220,485	251,710	9.1	11.3	+*
Wisconsin	103,895	105,950	8.7	9.4	+
West North Central	515,633	415,980	12.1	10.7	–*
Minnesota	98,936	87,340	9.5	9.1	–*
Iowa	72,000	53,270	9.8	7.9	–*
Missouri	172,955	157,040	14.8	14.7	–
North Dakota	27,354	17,820	15.7	11.5	–*
South Dakota	33,815	21,660	18.3	13.1	–*
Nebraska	45,952	36,100	12.0	10.1	–
Kansas	64,621	42,750	11.5	8.6	–*
South	3,815,961	3,098,210	23.5	19.6	–*
South Atlantic	1,605,208	1,397,080	20.7	18.2	–*
Delaware	17,372	14,300	12.0	10.4	–
Maryland	116,951	104,150	11.5	10.7	–
District of Columbia	37,193	22,740	23.2	15.7	–*
Virginia	214,357	155,750	18.2	13.7	–*
West Virginia	106,359	76,020	24.3	18.9	–*
North Carolina	312,545	221,210	24.0	17.8	–*
South Carolina	206,985	165,700	29.1	23.9	–*
Georgia	293,871	254,660	24.4	21.3	–
Florida	299,575	382,550	18.9	21.6	+
East South Central	987,444	696,460	29.3	21.7	–*
Kentucky	208,462	170,230	25.1	21.4	–
Tennessee	245,157	195,680	24.8	20.5	–*
Alabama	272,146	136,210	29.5	15.9	–*
Mississippi	261,679	194,340	41.5	32.6	–*
West South Central	1,223,309	1,004,670	23.9	20.3	–*
Arkansas	155,135	106,060	31.6	21.4	–*
Louisiana	308,850	219,900	30.1	22.9	–*
Oklahoma	122,548	86,990	19.5	14.6	–*
Texas	636,776	591,720	21.5	20.5	–
West	1,098,029	1,126,320	12.4	12.9	+
Mountain	336,281	328,530	14.7	13.8	–
Montana	24,998	22,760	12.9	12.5	–
Idaho	23,716	22,530	12.0	11.8	–
Wyoming	10,054	7,740	11.2	8.6	–*
Colorado	71,254	64,090	12.3	10.7	–
New Mexico	80,559	77,940	26.3	26.0	–
Arizona	84,014	92,430	17.5	16.8	–
Utah	30,796	25,270	10.0	8.0	–*
Nevada	10,890	15,770	8.8	11.0	+*
Pacific	761,746	797,790	11.6	12.8	+
Washington	80,172	81,290	9.3	10.0	+
Oregon	53,953	42,760	10.3	8.4	–*
California	595,765	648,050	12.1	13.8	+
Alaska	12,393	6,150	14.6	6.4	–*
Hawaii	19,465	19,540	9.7	9.6	–

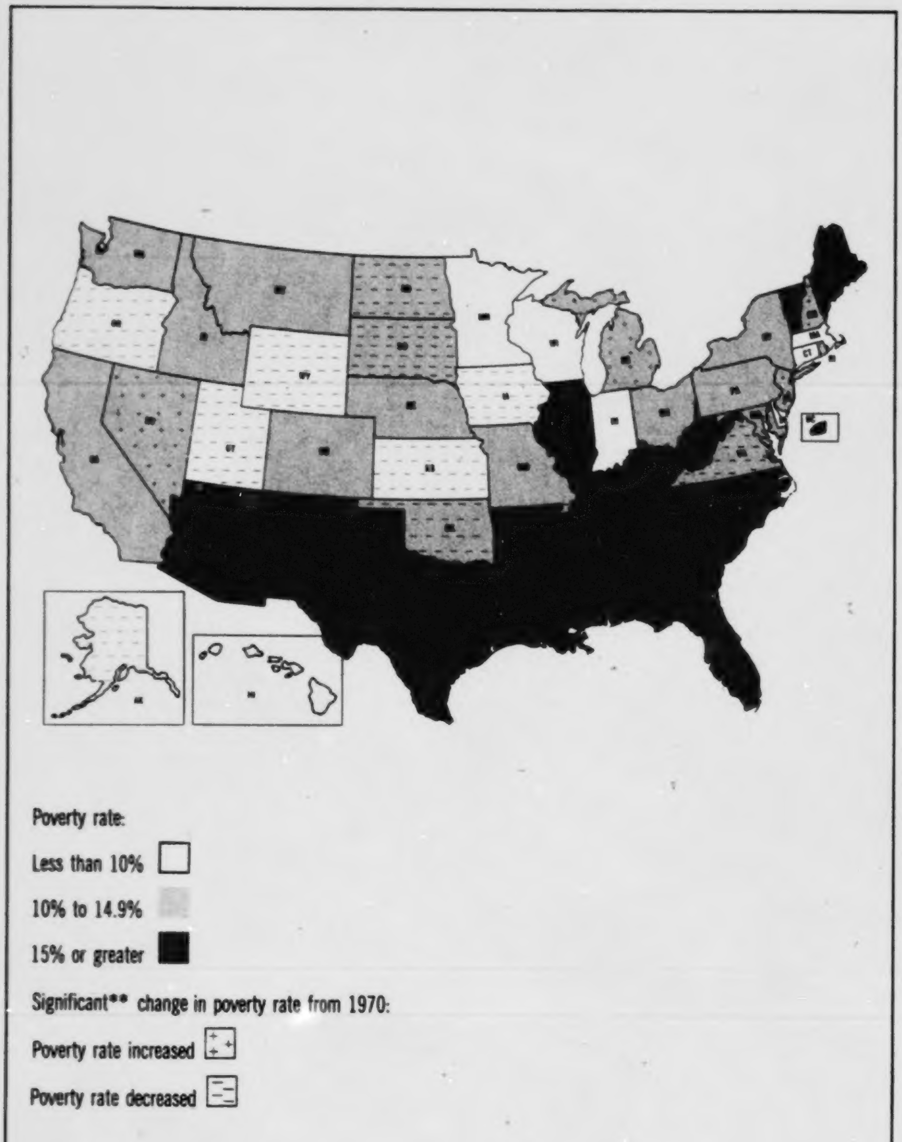
*Change is statistically significant at the 0.05 level.

NOTE: The definition of poverty is the one officially adopted by the Office of Management and Budget. The 1970 data are from the 1970 decennial census.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, unpublished tabulations.

Chart 1.14
School-Age Children* in Families Below the Poverty Level: 1975

Although the national poverty rate has changed little over the last 6 years, significant shifts have occurred regionally. Poverty has declined appreciably in the South, although it still remains highest there. Significant increases have been experienced in 6 States, all within the Northeastern and North Central regions.



WY
UT
CT
Poverty rate:
Less than 10% ☐
10% to 14.9% ▨
15% or greater ■
Significant** change in poverty rate from 1970:
Poverty rate increased
Poverty rate decreased

*5 to 17 years old.

**Statistically significant at the 0.05 level.

Table 1.15
Household languages of 4- to 18-year-olds, by State: Spring 1976

State or other area	Percentage distribution of 4- to 13-year-olds: Total	English	Other than English: Spanish	Other than English: Other	Not reported	Percentage distribution of 14- to 18-year-olds: Total	English	Other than English: Spanish	Other than English: Other	Not reported
United States	100.0	89.2	6.5	3.9	0.4	100.0	90.4	5.4	3.7	0.5
Northeast										
Connecticut	100.0	88.5	3.7	7.3	0.5	100.0	89.4	2.6	7.7	0.3
Delaware	100.0	95.6	2.5	1.9	0.0	100.0	95.7	1.4	2.5	0.4
District of Columbia	100.0	94.2	0.9	4.5	0.4	100.0	95.3	0.9	2.8	1.0
Maine	100.0	92.3	0.6	6.4	0.7	100.0	89.1	0.3	9.4	1.2
Maryland	100.0	95.1	1.0	3.8	0.1	100.0	95.6	0.3	4.0	0.1
Massachusetts	100.0	91.5	2.2	6.0	0.3	100.0	91.5	1.5	6.7	0.3
New Hampshire	100.0	92.0	0.3	7.2	0.5	100.0	91.3	0.2	8.2	0.3
New Jersey	100.0	86.9	7.2	5.7	0.2	100.0	91.7	4.1	4.2	0.0
New York	100.0	78.8	11.9	8.5	0.8	100.0	83.1	8.0	7.9	1.0
Pennsylvania	100.0	93.7	1.9	4.0	0.4	100.0	95.2	1.0	3.0	0.8
Rhode Island	100.0	92.0	1.0	6.6	0.4	100.0	86.4	0.7	12.2	0.7
Vermont	100.0	94.7	0.2	4.7	0.4	100.0	92.4	0.1	6.8	0.7
Southeast										
Alabama	100.0	97.7	0.4	0.7	1.2	100.0	98.9	0.0	0.7	0.4
Arkansas	100.0	97.9	0.7	0.2	1.2	100.0	98.3	0.8	0.9	0.0
Florida	100.0	89.3	9.5	1.1	0.1	100.0	89.5	9.1	1.4	0.0
Georgia	100.0	97.5	0.1	2.0	0.4	100.0	97.4	1.5	0.9	0.2
Kentucky	100.0	98.9	0.0	1.0	0.1	100.0	99.6	0.0	0.0	0.4
Louisiana	100.0	88.8	1.2	9.8	0.2	100.0	82.7	1.0	15.2	1.1
Mississippi	100.0	99.8	0.0	0.2	0.0	100.0	98.7	0.4	0.9	0.0
North Carolina	100.0	98.4	0.0	1.5	0.1	100.0	98.3	0.6	0.9	0.2
South Carolina	100.0	98.5	0.2	0.8	0.5	100.0	99.2	0.0	0.6	0.2
Tennessee	100.0	98.6	0.0	1.1	0.3	100.0	99.0	0.0	0.2	0.8
Virginia	100.0	96.4	1.3	2.1	0.2	100.0	96.9	1.5	1.4	0.2
West Virginia	100.0	98.7	0.2	0.9	0.2	100.0	99.6	0.0	0.2	0.2
Central										
Illinois	100.0	91.4	4.1	4.1	0.4	100.0	91.4	3.9	4.2	0.5
Indiana	100.0	94.9	1.9	2.4	0.8	100.0	96.8	1.2	1.6	0.4
Iowa	100.0	96.8	0.9	1.7	0.6	100.0	98.2	0.5	1.2	0.1
Kansas	100.0	95.7	1.2	2.8	0.3	100.0	95.2	1.6	2.7	0.5
Michigan	100.0	95.7	1.1	3.0	0.2	100.0	95.6	1.1	2.9	0.4
Minnesota	100.0	97.0	0.6	2.2	0.2	100.0	97.0	0.4	1.8	0.8
Missouri	100.0	97.9	0.2	1.4	0.5	100.0	96.7	0.0	2.7	0.6
Nebraska	100.0	96.4	2.3	1.2	0.1	100.0	94.7	2.0	2.6	0.7
North Dakota	100.0	96.1	0.3	3.4	0.2	100.0	95.5	0.1	4.0	0.4
Ohio	100.0	96.0	1.0	2.8	0.2	100.0	95.5	0.5	3.4	0.6
South Dakota	100.0	97.0	0.0	2.7	0.3	100.0	96.4	0.0	3.0	0.6
Wisconsin	100.0	97.3	0.5	1.5	0.7	100.0	97.3	1.2	1.3	0.2
West										
Alaska	100.0	85.7	1.3	12.6	0.4	100.0	84.0	0.6	14.6	0.8
Arizona	100.0	71.1	21.6	7.0	0.3	100.0	72.2	18.5	9.0	0.3
California	100.0	75.5	18.1	6.1	0.3	100.0	78.5	16.4	4.9	0.2
Colorado	100.0	86.7	10.3	3.0	0.0	100.0	87.7	9.1	3.2	0.0
Hawaii	100.0	75.3	1.0	23.4	0.3	100.0	73.9	0.0	25.9	0.2
Idaho	100.0	93.3	4.4	2.0	0.3	100.0	93.4	4.1	1.6	0.9
Montana	100.0	94.8	0.3	4.1	0.8	100.0	94.9	0.8	3.7	0.6
Nevada	100.0	90.6	5.9	3.1	0.4	100.0	90.6	4.1	4.6	0.7
New Mexico	100.0	51.1	36.8	10.7	1.4	100.0	51.5	38.6	8.9	1.0
Oklahoma	100.0	94.1	1.7	3.7	0.5	100.0	94.2	0.5	4.9	0.4
Oregon	100.0	95.2	1.7	3.0	0.1	100.0	95.9	1.5	2.2	0.4
Texas	100.0	69.1	28.2	2.1	0.6	100.0	73.4	24.0	2.3	0.3
Utah	100.0	94.7	2.4	2.7	0.2	100.0	93.6	3.5	2.5	0.4
Washington	100.0	94.4	2.3	2.6	0.7	100.0	94.7	2.6	2.1	0.6
Wyoming	100.0	93.6	3.1	2.8	0.5	100.0	93.2	3.8	2.4	0.6

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, unpublished data.

Chart 1.15
States With Children, 4 to 13 Years Old, With a Household Language Other Than English

Children in non-English-speaking households account for more than 10 percent of the elementary school-age population in 12 States. In three Southwestern States, more than one-fourth of the children reside in households where a language other than English (usually Spanish) is spoken.

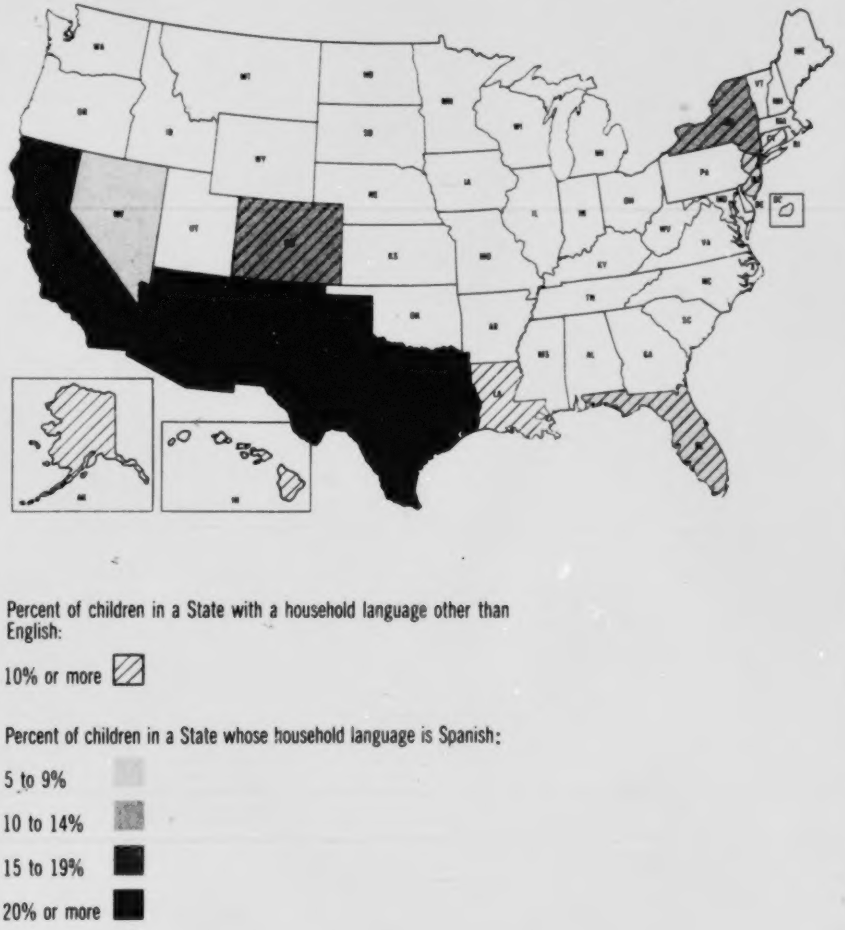

Percent of children in a State with a household language other than English:
10% or more ▨
Percent of children in a State whose household language is Spanish:
5 to 9%
10 to 14%
15 to 19%
20% or more

Table 1.16
Estimated handicapped population, 5 to 25 years old, by age group, enrollment status, and specific handicap: Spring 1976

Item	Total, 5 to 25 years old	5 to 13 years old	14 to 17 years old	18 to 25 years old
	(In thousands)			
Total population	80,091	32,701	16,745	30,645
Total population enrolled in school	58,244	31,215	15,917	11,112
Percent of total population	72.7	95.5	95.1	36.3
Handicapped population [1]	5,409	2,007	1,224	2,117
Percent of total population	6.8	6.1	7.3	7.1
Handicapped population enrolled in school [1]	3,712	1,954	1,127	631
Percent of handicapped population	68.6	97.4	92.1	29.0
Percent of total enrollment	6.4	6.3	7.1	5.7
Specific handicap [2]				
Retarded	423	143	97	183
Hard of hearing/deafness	310	177	65	68
Speech impairment	292	188	43	61
Difficulty with seeing/blindness	281	137	55	90
Seriously emotionally disturbed	208	88	45	75
Crippled	436	135	120	181
Heart trouble	246	101	70	75
Respiratory disorder	759	381	199	179
Other handicap	3,074	914	662	1,497

[1] Unduplicated counts.

[2] Duplicated counts; persons with multiple handicap may be counted in more than one category.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, Spring 1976, preliminary data.

Chart 1.16
Estimated Population Percentage and School Enrollment of Handicapped Persons

Handicapped persons comprise approximately 7 percent of the 5- to 25-year-old population. Enrollment is high among the handicapped of elementary school-age but falls below the enrollment rate of the general population among the older age groups.

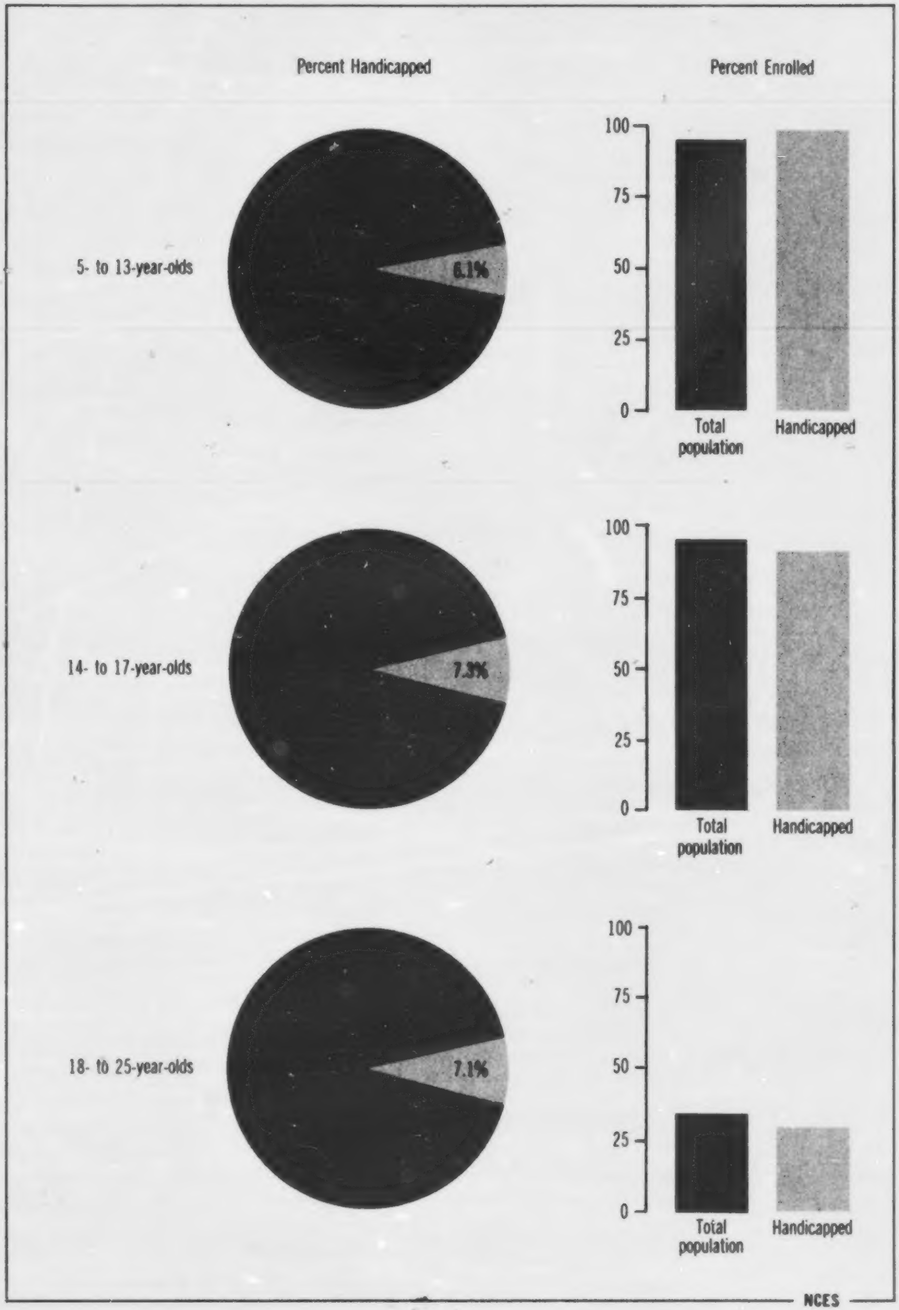


Table 1.17
Gross national product (GNP) related to total expenditures for education, health, and defense: 1939 to 1976

Calendar year	Gross national product	Expenditures for education [1]		Expenditures for health [2]		Expenditures for defense	
		Total	As a percent of GNP	Total	As a percent of GNP	Total	As a percent of GNP
		(In billions)					
1939	$90.5	$3.2	3.5	([3])	. . .	$1.2	1.3
1941	124.5	3.2	2.6	([3])	. . .	13.8	11.1
1943	191.6	3.5	1.8	([3])	. . .	79.7	41.6
1945	212.0	4.2	2.0	([3])	. . .	73.5	34.7
1947	232.8	6.6	2.8	([3])	. . .	9.1	3.9
1949	258.0	8.8	3.4	$11.6	4.5	13.2	5.1
1951	330.2	11.3	3.4	14.0	4.2	33.5	10.1
1953	366.1	13.9	3.8	15.7	4.3	48.6	13.3
1955	399.3	16.8	4.2	17.7	4.4	38.4	9.6
1957	442.8	21.1	4.8	21.1	4.8	44.0	9.9
1959	486.5	24.7	5.1	24.9	5.1	45.6	9.4
1961	523.3	29.4	5.6	28.8	5.5	47.0	9.0
1963	594.7	36.0	6.1	33.5	5.6	50.3	8.5
1965	688.1	45.4	6.6	40.5	5.9	49.4	7.2
1967	796.3	57.2	7.2	50.7	6.4	71.5	9.0
1969	935.5	[4]70.4	7.5	64.8	6.9	76.3	8.2
1971	1,063.4	[4]83.2	7.8	81.3	7.6	70.2	6.6
1973	1,306.6	98.5	7.5	99.1	7.6	73.4	5.6
1975	1,516.3	120.1	7.9	[5]130.4	[5]8.6	84.0	5.5
1976	1,692.4	131.1	7.7	([3])	. . .	88.2	5.2

[1] Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary, and higher education). Expenditures are for school year beginning in designated calendar year.

[2] Aggregate United States.

[3] Not available.

[4] Revised since originally published.

[5] Estimated by the National Center for Health Statistics.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*; U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Statistics of State School Systems; Financial Statistics of Institutions of Higher Education;* Social Security Administration, *Compendium of National Health Expenditures Data;* Council of Economic Advisers, *Economic Report of the President.*

Chart 1.17
Expenditures as a Percent of Gross National Product (GNP)

Almost 8 percent of the Gross National Product is spent for education by elementary and secondary schools and institutions of higher education. In recent years education expenditures have been surpassed by health expenditures.

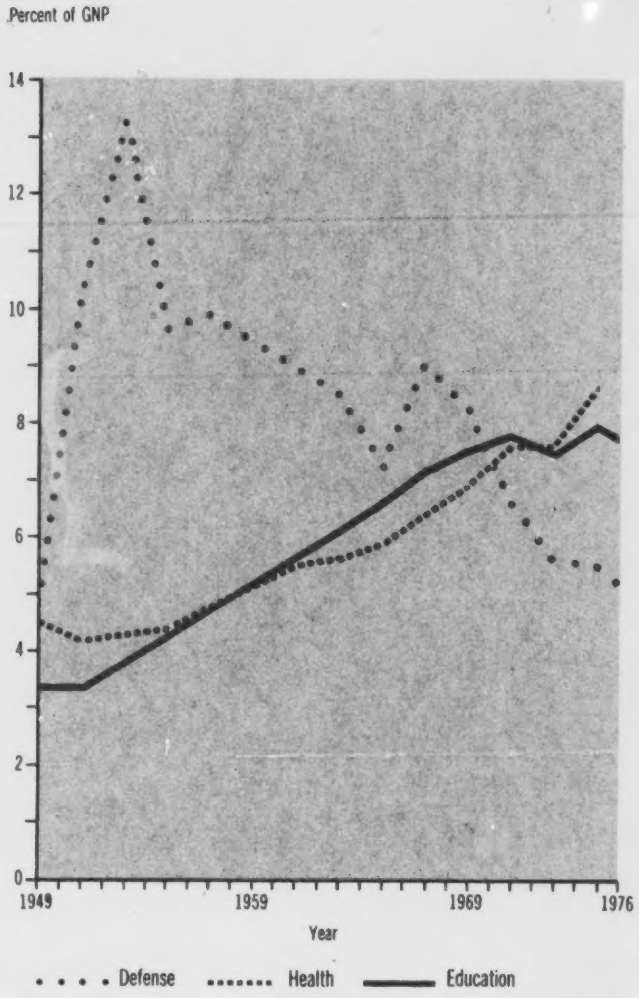


Table 1.18
General expenditures [1] of State and local governments, by function: Selected years, 1948 to 1976

Function	1948	1952	1957	1962	1967	1972	1975	1976
	(Current dollars, in millions)							
TOTAL	$17,684	**$26,098**	**$40,375**	**$60,206**	**$93,350**	**$168,549**	**$230,448**	**$256,731**
Education	5,379	8,318	14,134	22,216	37,919	65,814	87,858	97,216
Welfare, health, and hospitals	3,328	4,973	6,604	9,426	14,858	34,140	47,002	53,290
Highways	3,036	4,645	7,816	10,357	13,932	19,021	22,528	23,907
All other	5,941	8,162	11,821	18,207	26,641	49,574	73,060	82,318
	Percentage distribution							
TOTAL	100.0	**100.0**	100.0	100.0	**100.0**	100.0	100.0	**100.0**
Education	30.4	**31.9**	35.0	36.9	**40.6**	39.0	38.1	**37.9**
Welfare, health, and hospitals	18.8	**19.1**	16.3	15.6	**15.9**	20.2	20.4	**20.8**
Highways	17.2	**17.8**	19.4	17.2	**14.9**	11.3	9.8	**9.3**
All other	33.6	**31.2**	29.3	30.3	**28.6**	29.5	31.7	**32.1**

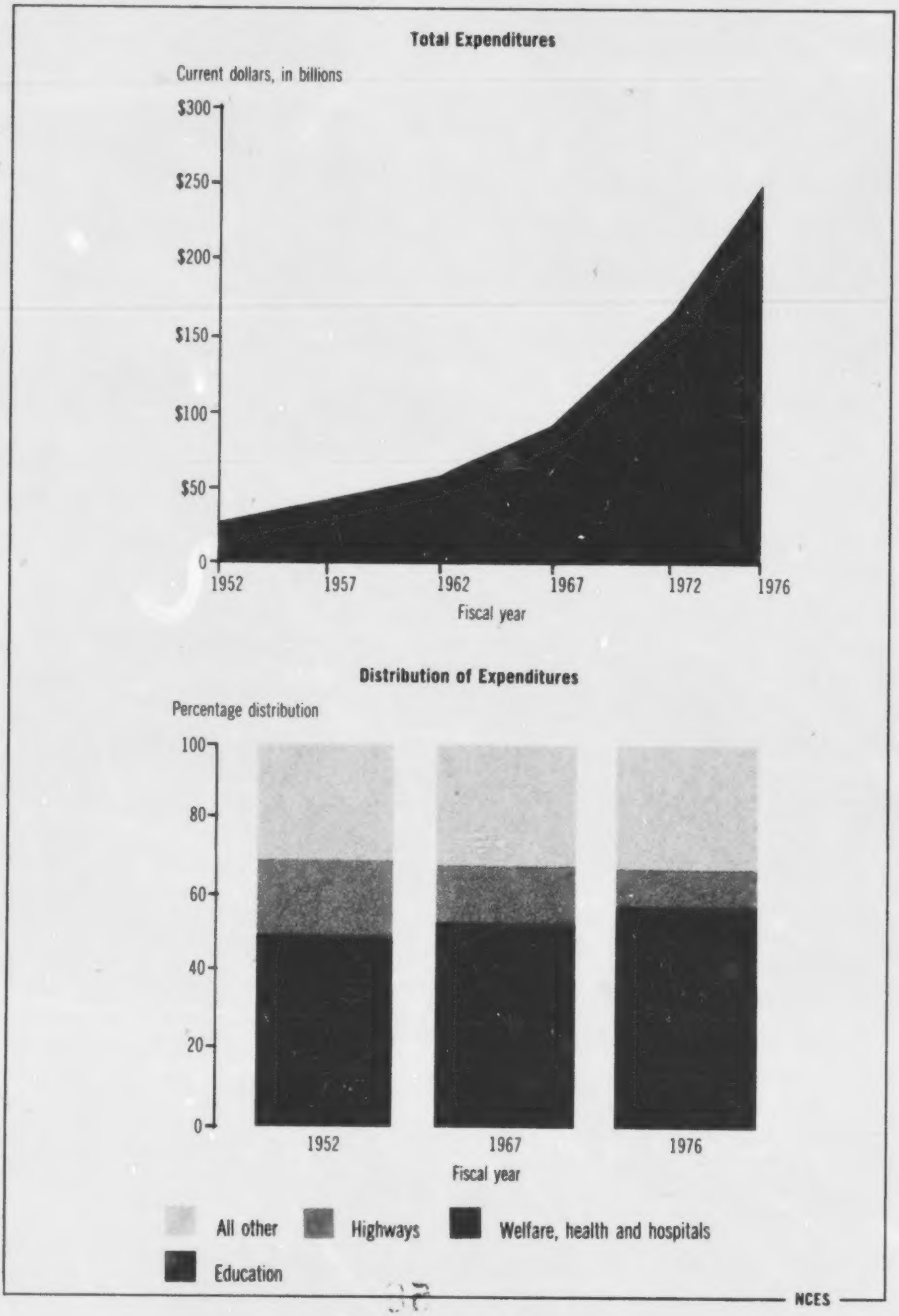
[1] Includes intergovernmental transfers.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *1972 Census of Governments,* Vol. 6 Topical Studies No. 4: Historical Statistics on Government Finances and Employment, 1974; *Governmental Finances in 1974-75,* Series GF 75, No. 5, 1976; *Governmental Finances in 1975-76,* Series GF 76, No. 5, 1977.

Chart 1.18
State and Local General Expenditures

Education commands a sizeable proportion, 38 percent, of State and local general expenditures, although its share has declined slightly since the 1960's. In absolute dollars, educational expenditures have more than doubled over the last decade.



Chapter 2
Elementary and Secondary Education

by Valena White Plisko
and Jay Noell

Elementary and secondary education has received increased public attention in the past few years. Several developments have contributed to this. First are demographic changes. As chapter 1 noted, the current age structure of the population is resulting in declining enrollments in elementary and secondary schools. These enrollment changes in turn are related to other issues. One is the general surplus of persons prepared to teach. Another is the continuing rise in education costs, at least in current dollars.

A second development has been the increasing demand for additional education services by previously underserved groups. Educators have long recognized that not all children need the same kind of education, but in the past many schools made only limited accommodations to the varied interests and characteristics of their students. In the 1960's the needs of poor and minority students became the focus of concern and more resources were devoted to them. More recently, other groups have attracted attention: students from non-English-speaking backgrounds, handicapped students, and gifted students, among others. The additional services needed by these groups and the best means of delivering them are still unresolved issues.

A third factor contributing to recent public interest in schooling is the dissatisfaction of many people with the achievements of students leaving the schools. Achievement levels of students have not improved as hoped and in some cases seem to have declined. This development has led some people to argue for a "return to basics", as well as for competency-based education requiring students to demonstrate mastery of core knowledge and skills.

A final factor contributing to public interest in the current state of education is the persisting problem of unemployment among young people. Unemployment raises the question of the appropriate relationship between the worlds of education and work. Should schools devote more attention to ensuring that students have specific knowledge and skills likely to lead to gainful employment? If so, what knowledge and skills? Is there a need for schools to devote more time to educating students about the world of work in general and the kinds of jobs and careers among which to choose?

This chapter presents data illuminating some of the issues being raised about current conditions in elementary and secondary education. Additional information can be found in chapter 4, which reviews education personnel, and in chapter 6, which examines the relationship between education and work from an international perspective.

Public and Professional Opinion

As noted in chapter 1, people's attitudes and opinions about education affect the way educational institutions are run. This chapter presents data on the opinions of the public, of parents of school children, and of teachers and principals about several issues relating to elementary and secondary education. The differences among these opinions suggest the need to examine all available perspectives.

The public has remained fairly constant in its view of problems facing the schools. In annual polls conducted since 1969, three problems have appeared consistently as foremost concerns. These are lack of discipline, integration and problems related to its implementation, and lack of proper financial support (entry 2.1). In recent years, lack of discipline has increasingly overshadowed other concerns. In 1977 twice as many respondents cited the disciplinary problem over the second most frequent concern, integration. Problems that have become less pressing since 1969 include a lack of proper facilities, dropping from 22 percent of the respondents in 1969 to 2 percent in 1977, and the difficulty of getting "good" teachers, which decreased from 17 to 11 percent. Concern about the use of drugs also seems to be easing somewhat. An issue that is of greater concern now than in 1969 is the problem of poor curriculum.

Public school teachers share with the public the opinion that student discipline and attitudes are problems in the schools (entry 2.2). In 1976, secondary school teachers cited discipline and student attitudes as the most important factors hindering them from doing their best, and the same concern appeared among the three foremost problems of elementary school teachers. Teachers also found problems with school management and their working conditions. Incompetent administration and a heavy work load were named as hindrances by more than 10 percent of the respondents at both teaching levels. The relatively small proportion of teachers indicating negative public attitudes as their most serious problem is also of interest.

A 1977 survey of public secondary school principals reveals that these administrators consider student apathy and absenteeism along with parents' lack of interest or involvement as the chief problems they face (entry 2.3). Principals also mention the paperwork involved in complying with governmental requirements as a major problem. Nevertheless, fewer than 15 percent cited serious problems in implementing Federal or State equal opportunity requirements. Further, fewer than 10 percent of the principals cited student disruptiveness as a serious concern and only a relatively small percentage indicated serious problems with teacher performance.

While integration, segregation, or busing is cited second most frequently by the public as a problem facing the public schools, public concern over this issue has diminished somewhat (recall entry 2.2). A 1977 survey by the National Opinion Research Center shows that fewer than 13 percent of the respondents believe that white and black children should go to separate schools (entry 2.4). Public attitudes have changed considerably since 1954, when a similar nationwide survey showed that 41 percent of the population disapproved of the Supreme Court decision barring segregation in the schools. In the years since this momentous decision, public opinion has turned increasingly against segregated schooling.

Although integrated schooling is generally accepted, interdistrict busing as a means to achieve racial balance is viewed as a distinct issue. In 1977, 12 percent of the white respondents and 46 percent of the black respondents approved of busing. Since 1972, there has been little change in public opinion about this issue.

The racial composition of schools also affects the opinions of whites towards integrated schooling. The vast majority of white respondents expressed no opposition to sending their children to schools with only a few black students (entry 2.5). When asked if they would oppose sending their children to schools where half of the students are black, opposition rose to 25 percent. About 58 percent of the white respondents expressed opposition to sending their children to schools where the white students would be the racial minority.

Given the public's perceptions of the basic issues facing public elementary and secondary education, it is informative to see how the schools are rated by parents whose children are attending a public school (entry 2.6). Each year since 1972, the Gallup Poll has asked parents of public school children to grade the local public schools. Although the grades in 1977 are lower than in 1974, the current ratings show an increase over 1975 and 1976. On a 4 point scale, where 4=A and 0=F, schools have an average rating of 2.6, or about C+. Only 4 percent of the parents gave the schools a failing grade.

School Enrollment

Chapter 1 reported substantial changes in recent years in the numbers of school-age children. At the preprimary level, the number of children 3 to 5 years old has declined since 1966 (entry 2.7). The proportion enrolled , however, has increased dramatically. While fewer than 30 percent of all children of these ages attended preprimary school in 1966, nearly half of these children now participate in preprimary programs. This development has resulted both from planned efforts aimed at providing early access to learning experiences and from general social forces. Clearly the rapid growth in labor force participation among mothers has influenced this increase (recall entry 1.9). During the 1970's the sharpest growth in the labor force participation rate occurred among women with children under 6 years old. Of course, the availability of preprimary programs may also influence a mother's decision about whether to work.

Because of compulsory attendance laws, enrollment changes in elementary and secondary schools follow closely changes in the sizes of the school-age populations (entry 2.8). The number of elementary school-age children peaked in the late 1960's, while at the secondary level peak enrollment occurred in 1975. It is anticipated that declines at both levels will continue throughout the 1970's. In the mid-1980's enrollments are projected to increase in elementary schools as children of women born in the postwar baby boom enter school. Increases at the secondary level are expected to follow.

The reasons underlying enrollment changes in private schools are more complex. Some of the changes in private school enrollments may be attributable to general demographic fluctuation. The number of children in private elementary schools has declined, as has the number in public schools. Yet a look at the proportion in private schools suggests that factors other than general population change are at work (entry 2.9). The closing of some Catholic elementary schools in the Northeast and Central States was in part responsible for a drop in the proportion of students enrolled in nonpublic schools in those regions. Integration of the public schools may also have contributed to changes in nonpublic school enrollments. Too, the preferences of some parents for educational experiences not available for their children in the local public schools may have affected the proportion enrolled in nonpublic schools.

While over 85 percent of the public believe that black and white students *should* attend the same schools, the actual extent to which black and white students *do* attend the same schools is limited. Though the percentage of black students attending integrated schools has increased somewhat for the continental United States as a whole since 1970, approximately two-thirds of all black public school students are still enrolled in predominantly minority or racially isolated schools (entry 2.10). While racial isolation has diminished appreciably in the South and somewhat in other regions, it has increased in the Northeast.

Financial Resources

Adequate financing for elementary and secondary schools is a prerequisite for quality education. Meeting educational needs of the various students enrolled in the schools is expensive and schools must compete for funds needed for other goods and services. Until very recently the increasing numbers of students and the public demand for improvements in the quality of education meant that school budgets were likely to rise. Inflation, especially in the past few years, has also been a factor in increasing the current-dollar level of budgets. But even when current expenditures are adjusted for inflation and enrollment size is taken into account, there has been a substantial increase in the level of spending on education since 1960 (entry 2.11). In that year $749 (in 1977 dollars) was spent on each pupil; by 1977, $1,578 was spent, an increase of over 110 percent.

The responsibility for elementary and secondary education has traditionally rested at the State and local level (entry 2.12). In 1975–76 local governments provided about 47 percent of per-pupil revenue for elementary and secondary education and the States contributed about 44 percent. In recent years, the shares provided for education by State governments have been increasing, in many cases due to financial equalization efforts within the States. Among the States, per-pupil revenues for education vary considerably. For example, local and State per-pupil revenues for education in Mississippi are about a third of the amounts in New York and Alaska, the highest spending States. As the chart suggests, Federal funding does contribute to reducing disparities among the States in that the poorest States tend to receive a somewhat greater share of revenues from Federal sources.

Within States, changes in disparities in per-pupil expenditures among school districts between 1970 and 1975 suggest that recent school finance reforms have had an equalizing impact (entry 2.13). Among the 19 States implementing school finance reform legislation between 1970 and 1975, within-State disparities in per-pupil expenditures have decreased in 9 and increased in only 2. In contrast, disparities increased in 11 and decreased in 6 of the 29 non-reform States.

There have also been changes in the financing of large city school systems in recent years. More large city school systems had receipts and expenditures equaling or exceeding their State's average in 1974–75 than in 1967–68 (entry 2.14). Large city school systems got relatively more revenues per pupil than the average district in their States in 1974–75 than in 1967–68. The majority of large city school systems also spent more per pupil for instruction and administration than the average district in their States in 1974–75.

School revenue patterns for large city school systems are related to the racial composition of the schools and to the percentage of families in the community who are poor (entry 2.15). Cities with higher proportions of black students, with few exceptions, tend to receive more funds per pupil from all sources relative to their State's average. The association between the relative number of students who are black and the relative share of revenues from Federal government sources is stronger, however, than those involving revenues from local or State governments. Total school revenues per pupil are also positively associated with the proportion of poor families. While this pattern is also observed for revenues from Federal sources, the greatest amount of Federal revenues went to cities in the medium-high poverty range rather than to the cities in the highest poverty range.

Organizational Resources

In order to educate all elementary and secondary school students, financial support must be translated into organizational resources, including school buildings and teachers, principals, superintendents, boards of education at local and State levels, and other essential professional and nonprofessional staff. In chapter 4, the status and prospects of education personnel, especially teachers, are considered. Here data on the characteristics of the elementary and secondary school system are presented.

Given the large increase in the number of students over the past 45 years, one might expect a similar increase in the number of schools. In fact, there has been a steady decline in the number of schools since the mid-1930's (entry 2.16). Most of the decline in the total number of schools has been due to closings of one-teacher schools. Other elementary schools have closed as well. Excluding one-teacher schools there were over 6,000 fewer public elementary schools in 1976 than in 1950. During the same period the number of secondary schools increased by less than 1,000. Most of the enrollment increase has been absorbed through expansion in the size of the schools.

Corresponding to a decline in the number of schools, there has also been a decline in the number of local education agencies and local education agency board members from the 1960's to the present (entry 2.17). School district consolidations have been responsible for most of the decline. Still, over 95,000 people served on local school boards in 1974. In contrast to declines on the local level, the numbers of State department of education staff members and of State board of education members have increased. This is no doubt due to the more active role in education taken by many States in recent years.

Private schools play an important role in elementary and secondary education. It is of interest to look at their participation in Federal programs designed to help meet the special needs of various types of students. Almost 82 percent of all private schools participate in one or more Federal programs. Over 87 percent of those with some religious affiliation participate and about 51 percent without religious affiliation do (entry 2.18). Among religiously affiliated schools, Roman Catholic schools are most likely to be participating in Federal programs (over 98 percent do), followed by Calvinist and Jewish schools. Roman Catholic, Calvinist, and Jewish schools are also most likely to be participating in programs authorized by the Elementary and Secondary Education Act, as amended, in which over 75 percent of all private schools participate.

Television has long been cited as having considerable potential as a medium of instruction. Although many people believe that the full potential of instructional television (ITV) has yet to be realized, over 70 percent of all teachers now report that it is available to them as an instructional technique (entry 2.19). Furthermore, they tend to have positive attitudes towards its use in teaching. For example, over 50 percent agree that it stimulates teacher creativity, while only 7 percent disagree (40 percent are neutral). In addition only 12 percent of teachers agree that ITV harms the personal relationship between student and teacher, while 54 percent disagree.

Given the national attention that crime has received in the past couple of years and the large proportion of crimes that are committed by juveniles, it is not surprising that attention has turned to crime in the schools. A recent survey revealed that, in 49 percent of all schools, one or more offenses had been reported to the police during the 5-month period of September 1974 through January 1975 (entry 2.20). Over 40 percent of elementary schools and 72 percent of secondary schools reported offenses. Among elementary schools, the most common offense (reported by over 30 percent of the schools) was burglary followed by personal theft (about 9 percent). Among secondary schools, burglary was also the most common offense (reported by over 48 percent of the schools), followed by drug abuse (almost 34 percent), personal theft (about 33 percent), and assault (21 percent). The incidence of crime varies by location, being lowest in nonmetropolitan areas. Among elementary metropolitan schools, the reported incidence was highest in central city schools. At the secondary level, central city schools differed little from other metropolitan schools in the percent reporting offenses. These statistics can be contrasted with the public opinion data presented earlier (entry 2.1) which listed crime as a less serious problem than many others. Only about 2 percent of the public identified crime as a major problem facing the public schools.

Outcomes

Education has many purposes. Although students are expected to learn basic concepts, important facts, and essential skills—how to read, write and calculate—the impact of education on a student is far greater. A student's outlook, emotions, and habits are also affected. In this section, however, the primary focus is on cognitive achievement for three reasons. First, there is a widespread belief that the most important task of the schools is to transmit cognitive knowledge, ensuring that all graduating students have attained minimum competence in basic skill areas. Second, there is a belief that schools recently have not been doing as well in transmitting knowledge as they had earlier. Third, there are limited data on the noncognitive outcomes of schooling.

Before turning to what students have actually learned in the schools, it is important to see how many students have officially graduated from high school. In 1975 over 3 million students graduated from regular public and nonpublic high school programs (entry 2.21), an increase of 68 percent since 1960. The proportion of 17-year-olds graduating, however, reached a high point in 1968 and has declined slightly since then. Increasing numbers of persons who failed to graduate from high school are taking the opportunity provided by high school equivalency examinations to formally certify their achievements. Since 1960 the number of General Education Development (G.E.D.) awards has more than tripled and now accounts for more than 7 percent of all high school completions. In some States, G.E.D. certificates comprise over 15 percent of all high school completions.

Although the number of high school completions is an important indicator of educational achievement, a more important outcome measure is what the students have learned. The National Assessment of Educational Progress (NAEP) provides comprehensive and comparable data on the performance of students in several subject areas. NAEP supplies baseline information on student achievement by various background characteristics and trend data on changes in performance by age group.

Summary measures of performances by whites, blacks, and Hispanics in several subject areas show that on all measures, and in all age groups, black and Hispanic students scored appreciably below the national mean scores (entry 2.22). In some subject areas, achievement disparities widened from the youngest to the oldest age group. The greater disparities among the 17-year-olds are even more alarming in that the scores of high school dropouts are not included in the results. Only in science and career/occupational development did the differences seem to diminish with age.

There have been some improvements, however, in performance in reading by black students over time (entry 2.23). This is particularly apparent among those in the 9-year-old age group. From 1971 to 1975, the scores of black 9-year-olds improved by almost 5 percentage points. For 13- and 17-year-old black students, improvement was noted only in the Southeast region. In the other regions of the country, reading performance of the two older age groups declined slightly.

The performances of 17-year-olds and young adults on the task of writing a job application letter provide a more specific measure of competence (entry 2.24). Performance in explanatory and persuasive letter writing is particularly important because it is a skill that has wide applicability after high school. Seventeen-year-olds and young adults were asked to write a job application letter in response to a help-wanted advertisement. Detailed information on the type of job, minimum requirements, and how to apply was provided in the exercise. The application letters were evaluated in terms of the information included and the format used.

Only 5 percent of the 17-year-olds provided all the essential information in their responses, compared to 10 percent of the young adults. Although most gave a correct job description and described their qualifications, few furnished references or provided a means for an interested employer to contact them. Relatively few 17-year-olds or young adults used correct business letter conventions in writing the letter. Only 8 percent of the 17-year-olds and 13 percent of the young adults met all the requirements for a business letter. The vast majority provided an appropriate greeting and closing, but most failed to show a proper return address. These findings provide background information for considering the data in chapter 6 on education and work experiences.

Table 2.1
Public opinion of major problems with which public schools must deal: 1969 to 1977

Major problems, by rank order in 1977	Percent of respondents citing problem								
	1969	1970	1971	1972	1973	1974	1975	1976	1977
Lack of discipline	26	18	14	23	22	23	23	22	26
Integration/segregation/busing	13	17	21	18	18	16	15	15	13
Lack of proper financial support	14	17	23	19	16	13	14	14	12
Difficulty of getting "good" teachers	17	12	11	14	13	11	11	11	11
Poor curriculum	4	6	3	5	7	3	5	14	10
Use of drugs	NA	11	12	4	10	13	9	11	7
Size of school/classes	NA	NA	NA	10	9	6	10	5	5
Parents' lack of interest	7	3	4	6	4	6	2	5	5
Pupils' lack of interest	3	(1)	2	NA	3	2	3	3	3
Lack of proper facilities	22	11	13	5	4	3	3	2	2
Crime/vandalism/stealing	NA	NA	2	NA	NA	NA	4	2	2
School board policies	NA	2	1	NA	4	4	1	3	1
There are no problems	4	5	4	2	4	3	5	3	4
Miscellaneous	8	3	6	9	4	4	12	8	5
Don't know/no answer	13	18	12	1[illegible]	13	17	10	12	16

NA: Not available.

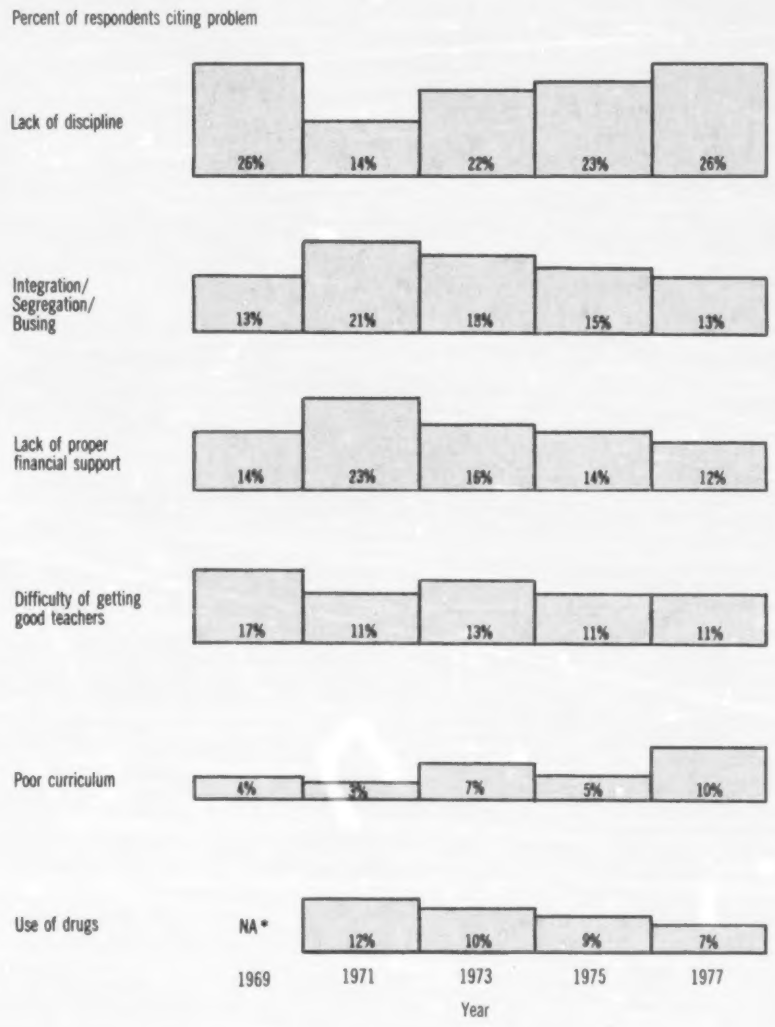
[1] Less than 1 percent.

NOTE: Totals add to more than 100 percent because of multiple answers.

SOURCE: Phi Delta Kappa, Inc., *The Gallup Polls of Attitudes Toward Education 1969–73* and "Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, various years.

Chart 2.1
Problems Facing the Public Schools: Public Opinion

Lack of discipline, racial issues, and lack of proper financial support have figured as problems foremost in the public's estimation since 1969. In recent years the concern with discipline has greatly overshadowed other problems.



* Not available

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Table 2.2
Public school teachers' opinions of the problems facing teaching: School year ending 1976

"What in your present position as a teacher hinders you most in rendering the best service of which you are capable?"

	Percentage distribution of public school teachers		
Responses to the question asked of public school teachers	Total	Elementary	Secondary
TOTAL	100.0	100.0	100.0
Discipline, student attitudes	17.1	**12.8**	**20.8**
Inexperience	0.7	0.0	1.3
Preparation time	9.3	**11.2**	**7.7**
Extra responsibilities	8.6	**10.1**	**7.2**
Lack of material, resources, and facilities	9.7	**9.2**	**10.1**
Laws and legal suits	0.7	0.4	1.0
Lack of teacher cooperation	2.0	2.3	1.8
Unprofessionalism of teachers	0.9	1.1	0.8
Incompetent administration	17.1	**15.4**	**18.8**
Heavy load	13.9	**15.1**	12.7
Negative attitude of public	5.7	**8.5**	3.2
Interruptions	0.6	0.9	0.3
Position not what I prepared for	1.3	0.5	1.9
Poor salary	0.4	0.4	0.5
Funds, or lack of	7.1	**6.7**	**7.5**
Other	5.0	5.5	4.5
No response	13.4	15.8	11.1
Sample size	[1]1,374	670	702

[1] Includes teachers not otherwise classified.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Education Association, *Status of the American Public School Teacher, 1975-76*, 1977.

Chart 2.2
Greatest Problem Facing the Public School Teacher: Teachers' Opinions

The problem of discipline and student attitudes was cited as the single greatest concern among secondary school teachers and appeared among the three foremost concerns of elementary school teachers. Incompetent administration and heavy work load were also named as problems by more than 10 percent of teachers at both levels.

Question asked of public school teachers: "What in your present situation as a teacher hinders you most in rendering the best service of which you are capable?"

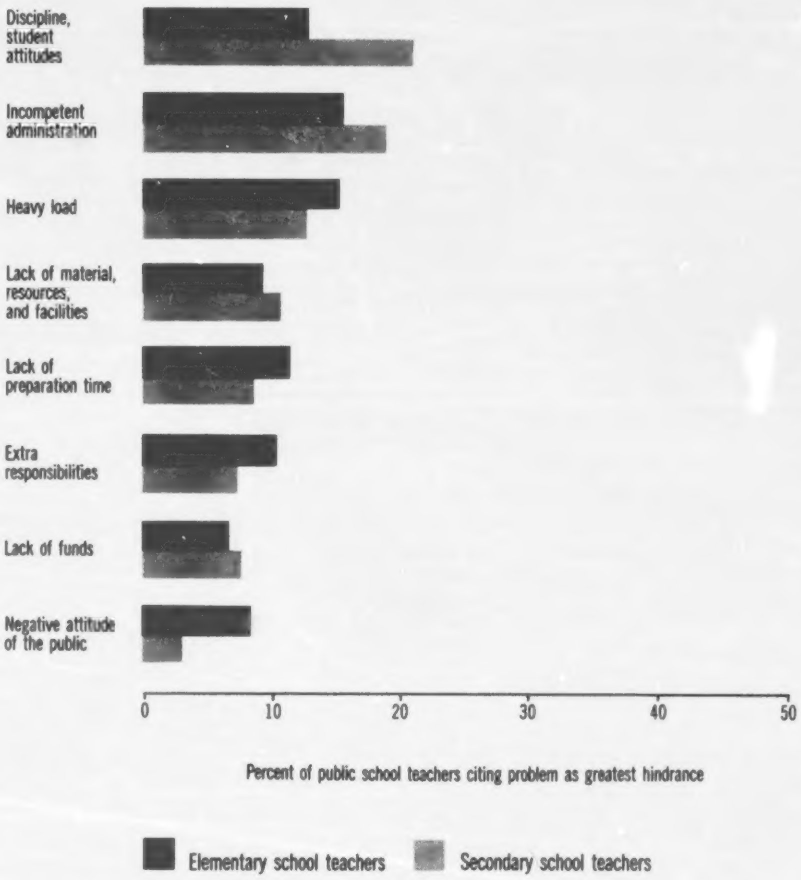

Table 2.3
Opinions of public secondary school principals on serious problems in the schools: School year ending 1977

To what degree is each of these matters a problem in your school?	Percentage distribution of responses*				
	Total	Very serious	Serious	Minor	Not at all
School too small to offer a wide range of courses	100.0	**6.4**	**19.7**	41.5	32.4
School too large to give students enough personal attention	100.0	**1.9**	**8.0**	31.7	58.4
Inadequate instructional materials	100.0	**0.9**	**9.4**	56.8	32.8
Not enough guidance counselors	100.0	**4.3**	**15.8**	41.0	38.8
Teacher absenteeism	100.0	**1.6**	**11.4**	59.3	27.7
Teacher union specifications	100.0	**1.9**	**10.3**	44.5	43.3
Teachers' lack of commitment or motivation	100.0	**1.6**	**13.5**	68.7	16.2
Teacher incompetence	100.0	**0.6**	**4.0**	74.9	20.5
Teacher turnover	100.0	**0.8**	**5.9**	58.7	34.6
Student absenteeism (entire day)	100.0	**4.6**	**30.4**	57.2	7.8
Students' cutting classes	100.0	**4.8**	**25.4**	60.1	9.7
Student apathy	100.0	**5.1**	**35.8**	54.4	4.7
Student disruptiveness	100.0	**0.3**	**6.7**	77.2	15.8
Parents' lack of interest in students' progress	100.0	**3.2**	**33.1**	58.4	5.3
Parents' lack of involvement in school matters	100.0	**5.3**	**35.1**	52.3	7.3
District office interference with principal's leadership	100.0	**1.3**	**5.6**	45.8	47.3
State-imposed curriculum restrictions	100.0	**1.1**	**7.7**	62.0	29.2
Implementing Federal or State requirements for equal opportunity (e.g., desegregation, employment)	100.0	**2.5**	**8.9**	55.6	33.0
Too much paperwork in complying with:					
District requirements	100.0	**4.7**	**15.3**	54.8	25.1
State requirements	100.0	**7.2**	**28.5**	50.9	13.4
Federal requirements	100.0	**12.2**	**30.2**	44.8	12.7
Other	100.0	**20.2**	**37.2**	30.6	17.9

* Sample size was 1,448.

SOURCE: U.S. Department of Health, Education, and Welfare, National Institute of Education/National Association of Secondary School Principals, *Survey of Public Secondary School Principals*, 1977, forthcoming.

Chart 2.3
Serious Problems in the Schools: Public Secondary School Principals' Opinions

Although student disruptiveness was low on the list of problems cited by public secondary school principals, apathy on the part of students and parents figured among the top concerns.

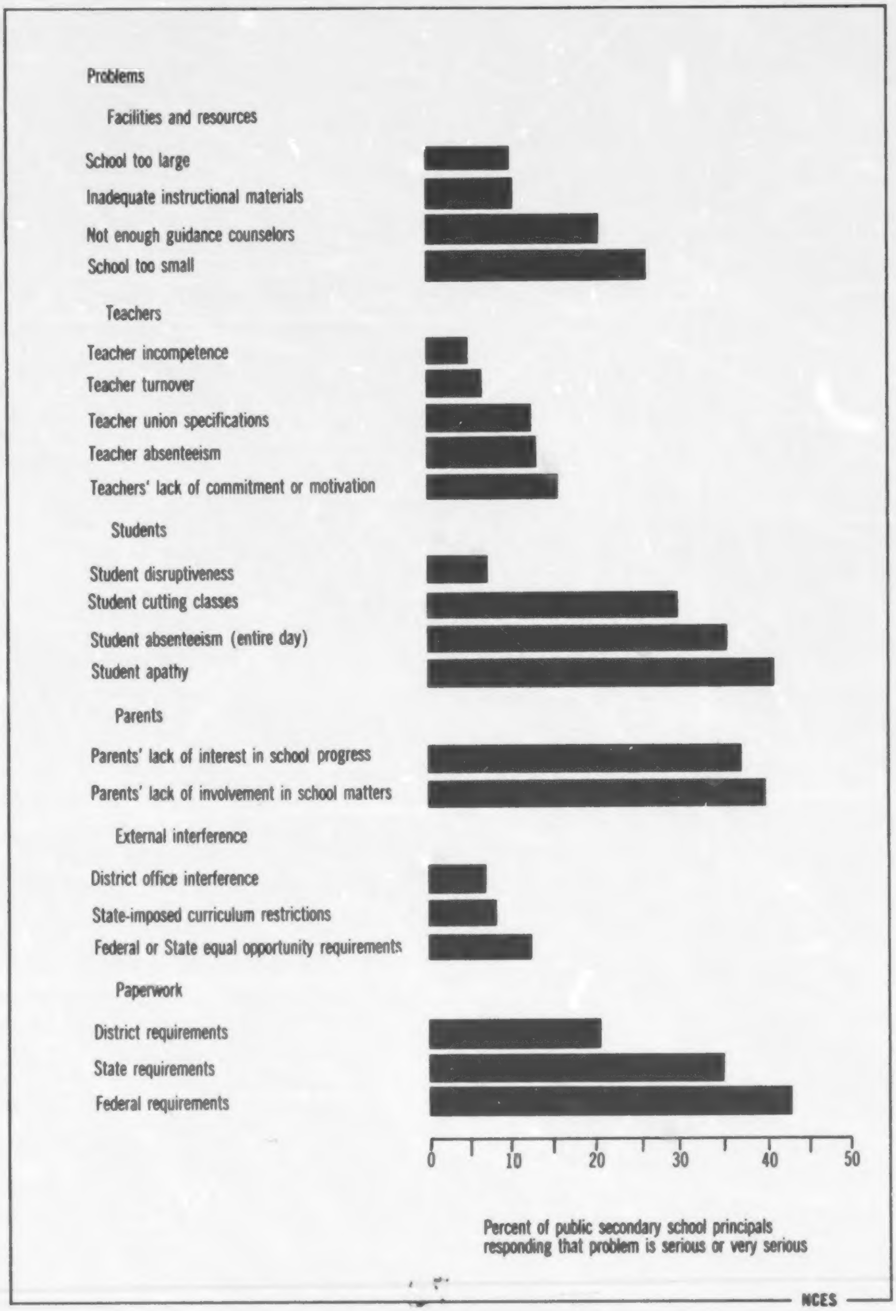

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Table 2.4
Public opinion on integrated schools and interdistrict busing: 1977

Do you think white students and black students should go to the same schools or separate schools?

Responses to question	Total [1]	White	Black
TOTAL	100.0	100.0	100.0
Same schools	85.4	84.8	91.4
Separate schools	13.0	13.6	6.9
Don't know/no answer	1.6	1.6	1.7

In general do you favor or oppose the busing of black and white children from one school district to another?

Responses to question	Total [1]	White	Black
TOTAL	100.0	100.0	100.0
Favor	16.3	12.3	45.7
Oppose	81.1	85.3	50.3
Don't know/no answer	2.6	2.4	4.0
Sample size	1,520	1,330	175

[1] Includes responses of whites, blacks, and others. "Other" category sample size too small to be shown separately.

SOURCE: National Opinion Research Center, *General Social Survey*, 1977, special tabulations.

Chart 2.4
Integrated Schools and Interdistrict Busing: Public Opinion

Both whites and blacks overwhelmingly support the concept of racially integrated schools but are divided on the issue of interdistrict busing.

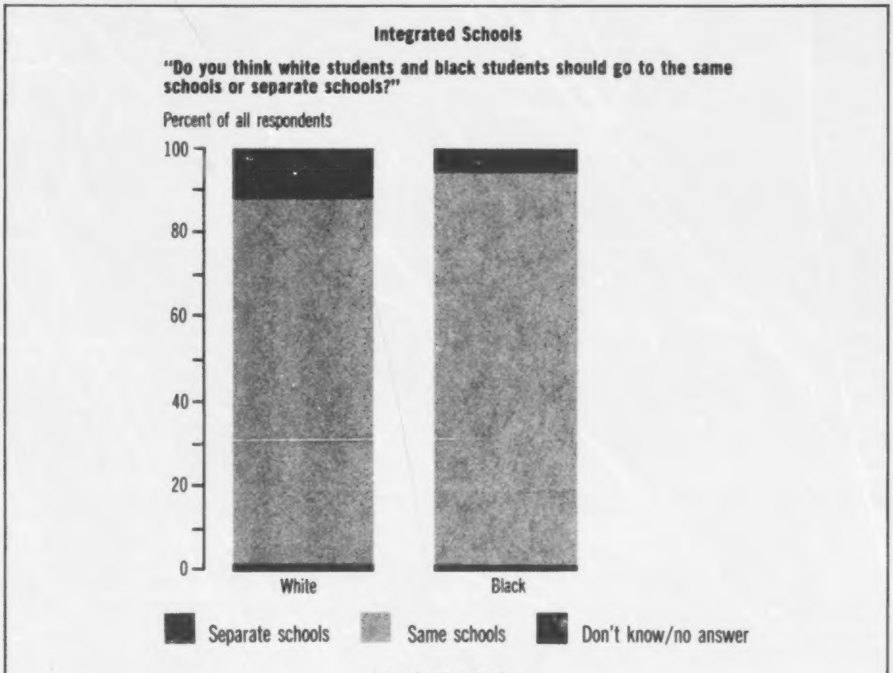

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Table 2.5
Attitudes of white respondents on sending their children to integrated schools: 1972, 1974, 1975, and 1977

	Percentage distribution of white respondents			
Question item and responses	1972	1974	1975	1977
Objection to school where a few children are black				
TOTAL	100.0	100.0	100.0	100.0
Yes	**7.1**	**5.2**	**6.8**	**7.2**
No	91.9	94.3	91.5	92.1
Don't know	0.1	0.5	1.7	0.7
Objection to school where half of children are black				
TOTAL	100.0	100.0	100.0	100.0
Yes [1]	**23.2**	**28.3**	**27.3**	**24.4**
No	74.0	68.8	69.1	73.1
Don't know	2.8	2.9	3.6	2.5
Objection to school where more than half of children are black				
TOTAL	100.0	100.0	100.0	100.0
Yes [2]	**53.2**	**60.0**	**57.6**	**57.8**
No	41.9	35.3	37.2	38.2
Don't know	4.9	4.7	5.2	4.0
Sample size	1,352	1,311	1,327	1,354

[1] Includes those with an objection to sending their children to school where a few children are black.

[2] Includes those with an objection to sending their children to school where a few children are black or where a half of the children are black.

SOURCE: National Opinion Research Center, *General Social Survey*, 1973, 1974, 1975, 1977.

Chart 2.5
Attitudes of Whites to Sending Children to School With Blacks

Most whites would not object to sending their children to schools where half the students were black but would object to schools where whites were the racial minority.

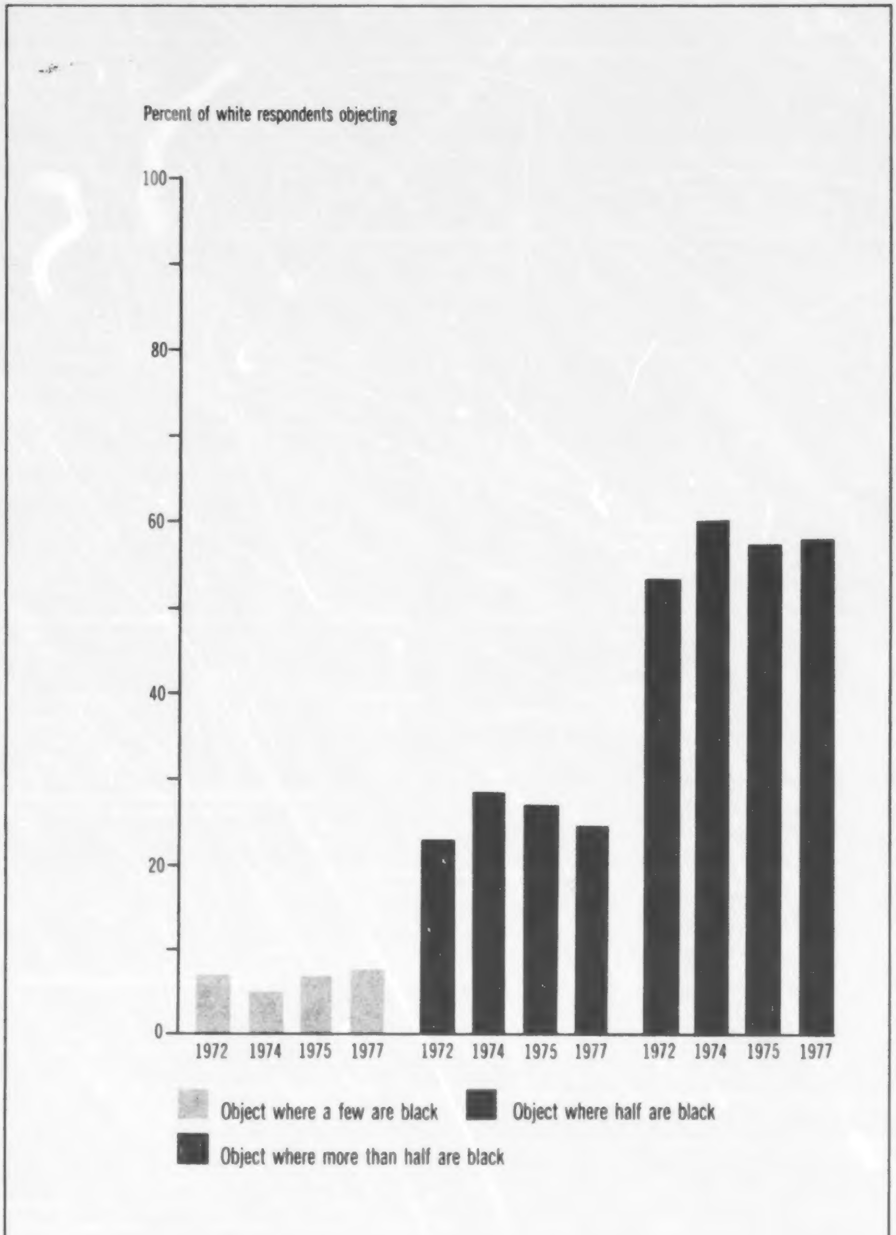

Table 2.6
Quality of the public schools: Opinions of parents with public school children, 1974 to 1977

Responses of parents of public school children to the question: "Students are often given the grades A, B, C, D, and F (Fail) to denote the quality of their work. Suppose the public schools themselves, in this community, were graded in the same way. What grade would you give the public schools here—A, B, C, D, or F?"

Item	Year			
	1974	1975	1976	1977
	(Percentage distribution)			
TOTAL	**100**	**100**	**100**	**100**
A rating	**22**	**17**	**16**	**18**
B rating	**42**	**36**	**34**	**36**
C rating	**24**	**29**	**30**	**26**
D rating	**4**	**8**	**10**	**9**
F (fail) rating	**3**	**7**	**5**	**4**
Don't know/no response	**5**	**3**	**5**	**7**
Mean rating [1]	**2.80**	**2.49**	**2.48**	**2.59**

[1] Calculated on a 4-point scale with 4=A, 3=B, 2=C, 1=D, 0=F.

SOURCE: Phi Delta Kappa, Inc., "Annual Gallup Poll of the Public Attitudes Towards the Public Schools," *Phi Delta Kappan*, various years.

Chart 2.6
Quality of the Public Schools: Parents' Opinions

When asked to rate the public schools, parents gave the schools a C+, a slight improvement over the previous 2 years.

"Students are often given the grades A, B, C, D, and FAIL to denote the quality of their work. Suppose the public schools themselves, in this community, were graded in the same way. What grade would you give the public school here—A, B, C, D, or FAIL?"

Percentage distribution of responses given by parents of public school children

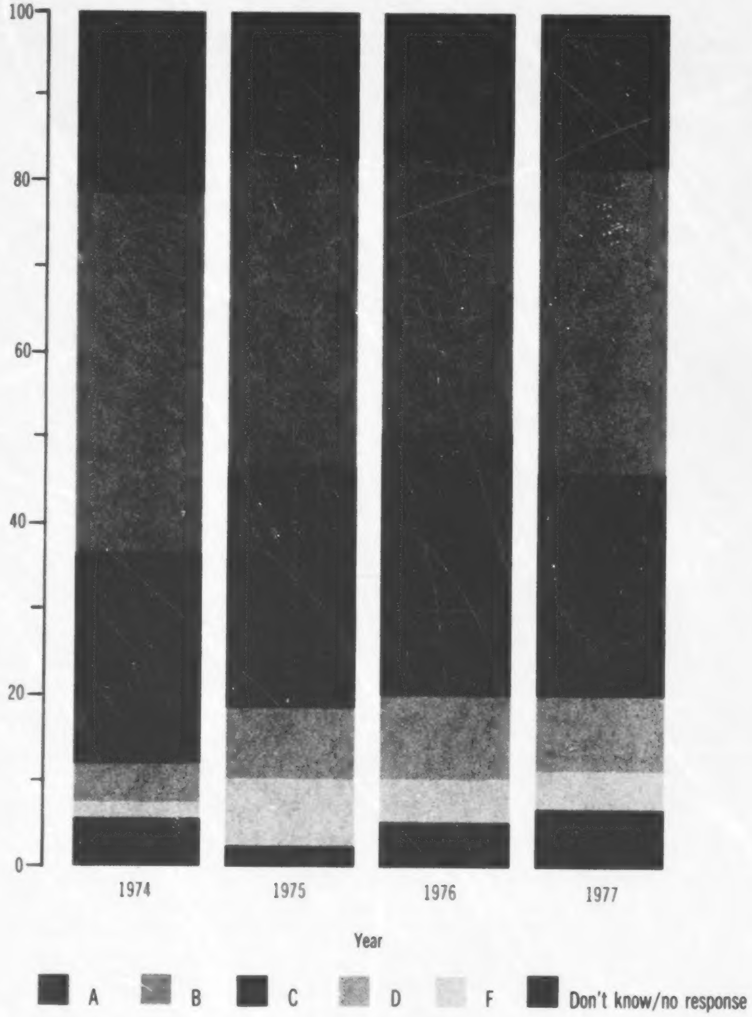

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Table 2.7
Preprimary enrollment of children, 3 to 5 years old: 1966 to 1976

Fall of year	Total children, 3 to 5 years old	Children enrolled in preprimary programs	
		Number	Percent
	(Numbers in thousands)		
1966.	**12,468**	**3,674**	29.4
1967.	**12,242**	**3,868**	31.6
1968.	**11,905**	**3,928**	33.0
1969.	**11,424**	**3,949**	34.6
1970.	**10,949**	**4,104**	37.5
1971.	**10,610**	**4,148**	39.1
1972.	**10,166**	**4,231**	41.6
1973.	**10,344**	**4,234**	40.9
1974.	**10,393**	**4,699**	45.2
1975.	**10,185**	**4,955**	48.7
1976.	**9,727**	**4,787**	49.2

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Preprimary Enrollment, October 1975* and unpublished data.

Chart 2.7
Preprimary Enrollment of 3- to 5-Year-Olds

Although the number of children 3 to 5 years old has fallen over the past 10 years, the proportion enrolled in preprimary programs has steadily climbed. Just under 50 percent of the 3- to 5-year-old age group are currently enrolled.

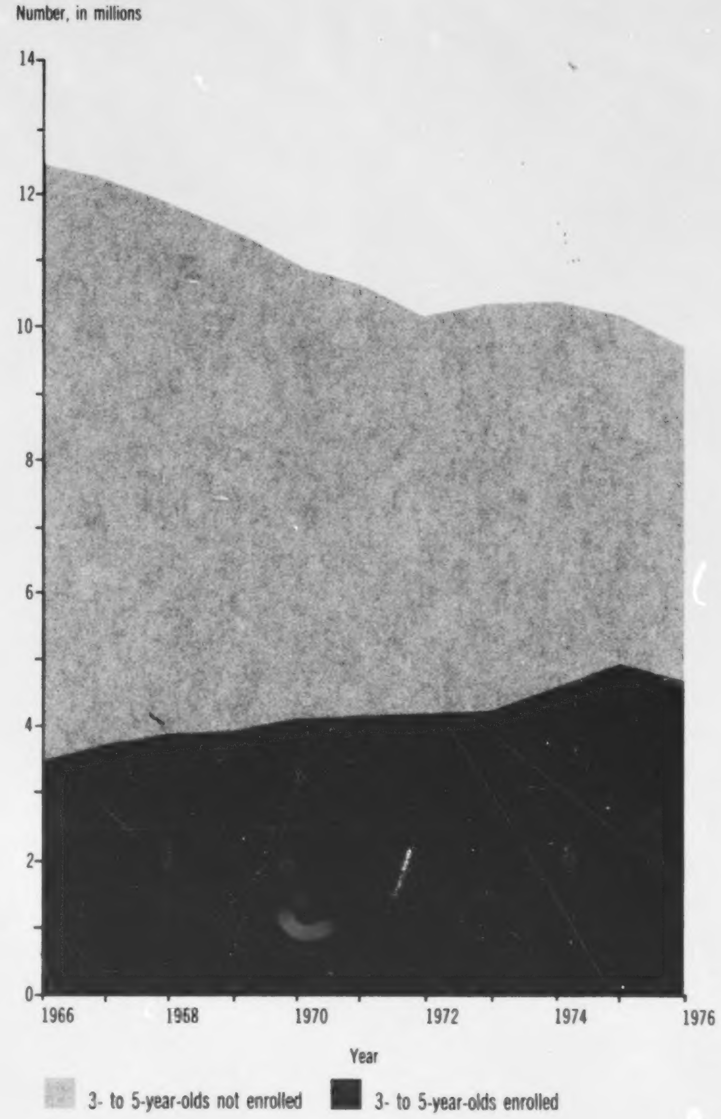

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Table 2.8
Enrollment in regular elementary and secondary day schools, by institutional control and organizational level, with alternate projections: Fall 1954 to fall 1986

Fall of year	Total public and nonpublic			Public			Nonpublic (estimated)		
	Total	Elementary	Secondary	Total	Elementary	Secondary	Total	Elementary	Secondary
				(Number in thousands)					
1954	33,949	**24,922**	**9,027**	29,549	21,322	8,227	4,400	3,600	800
1956	36,619	**26,217**	**10,402**	31,719	22,217	9,502	4,900	4,000	900
1958	39,581	**27,915**	**11,666**	34,081	23,415	10,666	5,500	4,500	1,000
1960	42,181	**29,150**	**13,031**	36,281	24,350	11,931	5,900	4,800	1,100
1962	44,849	**30,164**	**14,685**	38,749	25,264	13,485	6,100	4,900	1,200
1964	47,716	**31,221**	**16,495**	41,416	26,221	15,195	6,300	5,000	1,300
1966	49,239	**31,905**	**17,334**	43,039	27,105	15,934	6,200	4,800	1,400
1968	50,744	**31,763**	**18,981**	44,944	27,363	17,581	5,800	4,400	1,400
1970	51,309	**31,601**	**19,708**	45,909	27,501	18,408	5,400	4,100	1,300
1972	50,744	**31,023**	**19,721**	45,744	27,323	18,421	5,000	3,700	1,300
1974	50,053	**29,982**	**20,071**	45,053	26,382	18,671	5,000	3,600	1,400
1976	49,335	**29,030**	**20,305**	44,335	25,430	18,905	5,000	3,600	1,400
				Intermediate alternative projection					
1978	47,840	**28,175**	**19,665**	42,840	24,575	18,265	5,000	3,600	1,400
1980	46,094	**27,602**	**18,492**	41,094	24,002	17,092	5,000	3,600	1,400
1982	44,809	**27,271**	**17,538**	39,809	23,671	16,138	5,000	3,600	1,400
1984	44,546	**27,402**	**17,144**	39,546	23,802	15,744	5,000	3,600	1,400
1986	45,244	**28,532**	**16,712**	40,244	24,932	15,312	5,000	3,600	1,400
				Low alternative projection					
1978	47,840	**28,175**	**19,665**	42,840	24,575	18,265	5,000	3,600	1,400
1980	46,076	**27,584**	**18,492**	41,076	23,984	17,092	5,000	3,600	1,400
1982	44,535	**26,997**	**17,538**	39,535	23,397	16,138	5,000	3,600	1,400
1984	43,477	**26,333**	**17,144**	38,477	22,733	15,744	5,000	3,600	1,400
1986	43,193	**26,481**	**16,712**	38,193	22,881	15,312	5,000	3,600	1,400
				High alternative projection					
1978	47,840	**28,175**	**19,665**	42,840	24,575	18,265	5,000	3,600	1,400
1980	46,126	**27,634**	**18,492**	41,126	24,034	17,092	5,000	3,600	1,400
1982	45,223	**27,685**	**17,538**	40,223	24,085	16,138	5,000	3,600	1,400
1984	46,014	**28,870**	**17,144**	41,014	25,270	15,744	5,000	3,600	1,400
1986	48,068	**31,856**	**16,712**	43,068	27,756	15,312	5,000	3,600	1,400

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986–87*, forthcoming.

Chart 2.8
Enrollment in Regular Day Schools

Following population patterns, enrollments in elementary and secondary schools will decline through the early 1980's. The projected growth of elementary school enrollments in the mid-1980's will depend on fertility rates among the increasing number of women of childbearing age.

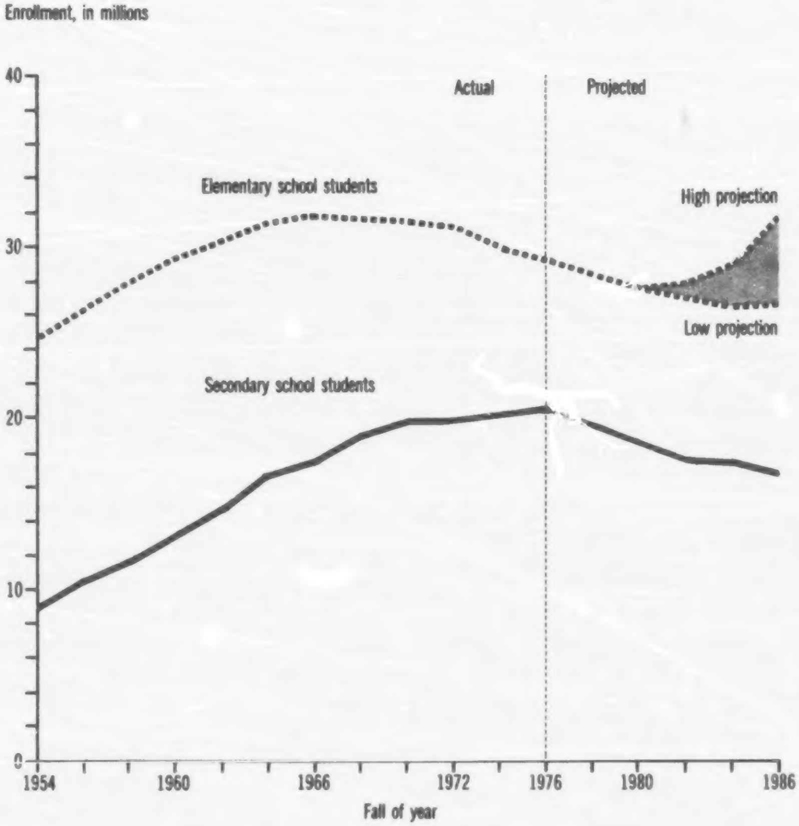

Table 2.9
Enrollment in private elementary and secondary schools, by region: 1968 to 1976

Level, region, and enrollment category	1968	1969	1970	1971	1972	1973	1974	1975	1976
Elementary level					(Numbers in thousands)				
United States:									
Total enrollment	33,727	NA	33,916	33,479	32,219	31,447	31,100	30,409	29,741
Private enrollment	4,232	NA	3,948	3,678	3,549	3,268	3,165	3,278	3,073
Private enrollment as percent of total	12.5	...	11.6	11.0	11.0	10.1	10.2	10.8	10.3
Northeast:									
Total enrollment	8,488	NA	8,596	8,526	8,190	7,968	7,957	7,779	7,483
Private enrollment	1,742	NA	1,507	1,386	1,342	1,227	1,146	1,080	1,072
Private enrollment as percent of total	20.5	...	17.5	16.3	16.4	15.4	14.4	13.9	14.3
Southeast:									
Total enrollment	7,682	NA	7,611	7,360	7,635	7,327	7,085	6,863	6,729
Private enrollment	431	NA	471	470	483	553	605	659	577
Private enrollment as percent of total	5.6	...	6.2	6.4	6.3	7.5	8.5	9.6	8.6
Central:									
Total enrollment	9,578	NA	9,735	9,677	9,172	8,913	8,443	8,309	8,036
Private enrollment	1,498	NA	1,491	1,291	1,210	1,048	953	1,042	896
Private enrollment as percent of total	15.6	...	15.3	13.3	13.2	11.8	11.3	12.5	11.1
West:									
Total enrollment	7,958	NA	7,975	7,916	7,677	7,723	7,614	7,458	7,493
Private enrollment	560	NA	476	531	513	438	462	499	530
Private enrollment as percent of total	7.0	...	6.0	6.7	6.7	5.7	6.1	6.7	7.1
Secondary level									
United States:									
Total enrollment	13,914	NA	14,459	14,957	14,979	15,160	15,236	15,422	15,500
Private enrollment	1,314	NA	1,147	1,108	1,145	1,171	1,156	1,161	1,192
Private enrollment as percent of total	9.4	...	7.9	7.4	7.6	7.7	7.6	7.5	7.7
Northeast:									
Total enrollment	3,582	NA	3,670	3,769	3,933	3,835	3,549	3,959	3,955
Private enrollment	539	NA	462	428	412	446	427	419	475
Private enrollment as percent of total	15.0	...	12.6	11.4	10.5	11.6	12.0	10.6	12.0
Southeast:									
Total enrollment	2,955	NA	3,060	3,191	3,124	3,152	3,237	3,310	3,276
Private enrollment	146	NA	143	187	176	176	206	212	184
Private enrollment as percent of total	4.9	...	4.7	5.9	5.6	5.6	6.3	6.4	5.6
Central:									
Total enrollment	3,982	NA	4,263	4,470	4,372	4,411	4,340	4,452	4,474
Private enrollment	453	NA	383	345	410	392	344	374	364
Private enrollment as percent of total	11.4	...	9.0	7.7	9.3	8.9	7.9	8.4	8.1
West:									
Total enrollment	3,396	NA	3,469	3,527	3,549	3,732	3,727	3,699	3,797
Private enrollment	178	NA	157	149	143	155	175	158	160
Private enrollment as percent of total	5.2	...	4.5	4.2	4.0	4.1	4.7	4.2	4.2

NA: Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, unpublished tabulations.

Chart 2.9
Enrollment in Private Elementary and Secondary Schools

Although private school enrollments have fluctuated regionally, the proportion of students enrolled in private schools continues to be highest in the Northeast.

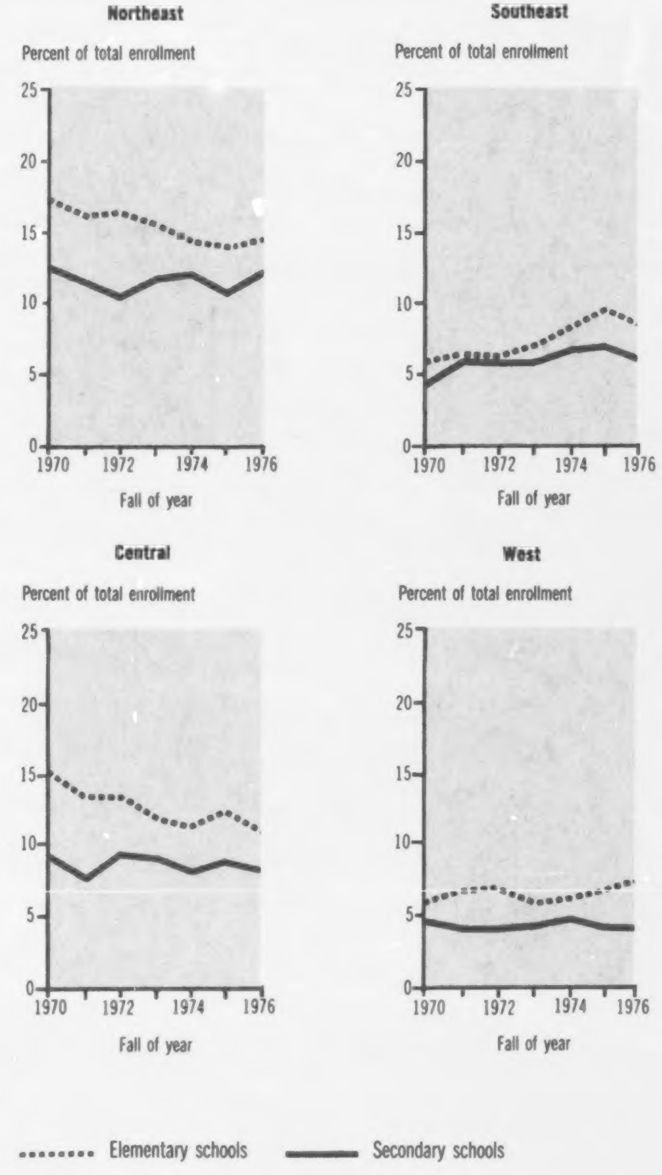

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Table 2.10
Number and percent of black students attending public schools with different racial compositions, by geographic area: Fall 1970, fall 1972, and fall 1974

Area	Attending 0–49% minority schools		Attending 50–89% minority schools		Attending 90–100% minority schools	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Continental U.S.:						
1970	1,789,948	29.1	1,506,369	24.5	2,858,837	46.4
1972	2,024,116	32.4	1,596,004	25.6	2,621,635	42.0
1974	2,027,855	33.2	1,607,417	26.3	2,477,339	40.5
Northeast:						
1970	206,997	**21.2**	255,363	**26.2**	510,625	**52.5**
1972	204,408	**20.4**	250,620	**24.9**	548,079	**54.6**
1974	178,729	**19.0**	219,087	**23.2**	544,795	**57.8**
Border States & D.C.:						
1970	126,584	**21.4**	86,130	**14.6**	377,034	**63.9**
1972	148,583	**24.9**	79,580	**13.3**	369,736	**61.8**
1974	163,421	**28.1**	78,264	**13.5**	339,204	**58.4**
South:						
1970	1,157,914	**37.9**	852,800	**27.9**	1,045,380	**34.2**
1972	1,342,069	**43.8**	935,367	**30.5**	789,457	**25.7**
1974	1,352,800	**44.5**	979,124	**32.2**	711,120	**23.4**
Midwest:						
1970	181,105	**16.8**	203,477	**18.8**	695,070	**64.4**
1972	203,907	**18.5**	204,786	**18.6**	693,814	**62.9**
1974	209,881	**19.4**	199,935	**18.4**	673,949	**62.2**
West:						
1970	117,357	**25.7**	108,599	**23.8**	230,728	**50.5**
1972	124,249	**26.4**	125,651	**26.7**	220,549	**46.9**
1974	123,025	**26.6**	131,007	**28.3**	208,271	**45.1**

SOURCE: U.S. Department of Health, Education, and Welfare, National Institute of Education, *Trends in Black Segregation, 1970–74*, Volume I, P-76-0353, 1977.

Chart 2.10
Distribution of Black Students in Public Elementary and Secondary Schools

Although integration has progressed in the South and in the border States, racial isolation has increased in the Northeast since 1970.

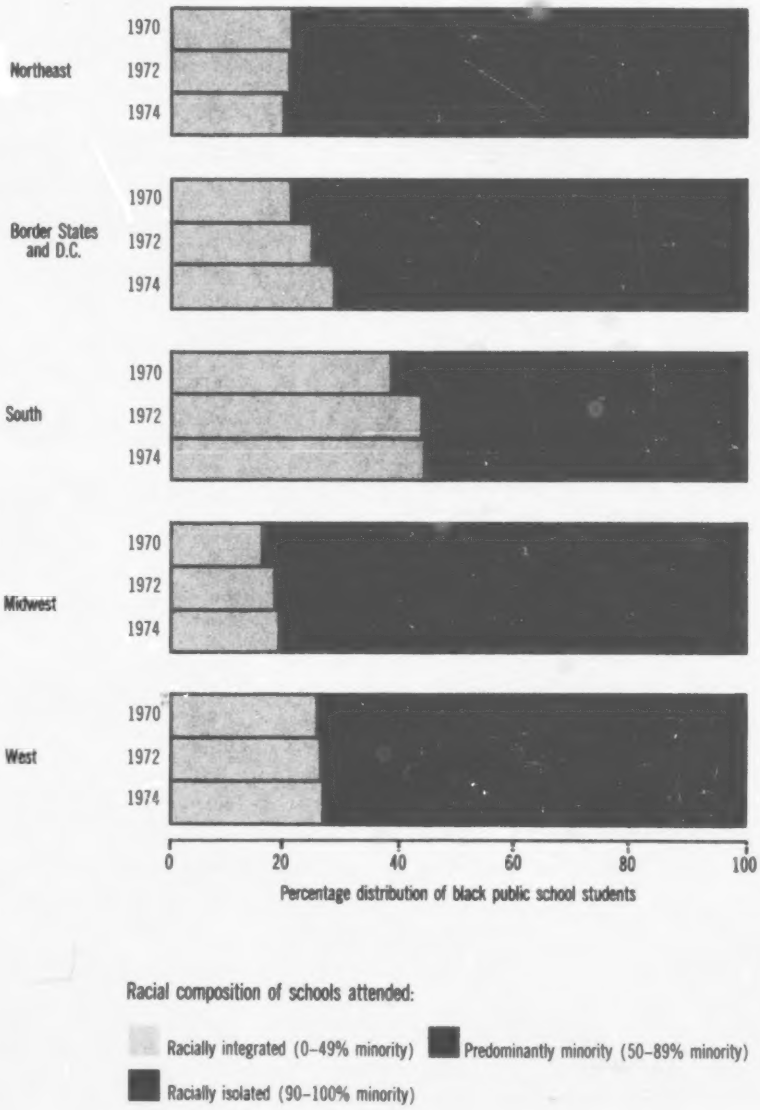

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Table 2.11
Per-pupil expenditures in average daily attendance in public elementary and secondary schools: School year ending 1930 to 1977

School year ending	Total expenditures [1]		Current expenditures [2]	
	Current dollars	Constant 1976–77 dollars [3]	Current dollars	Constant 1976–77 dollars [3]
1930	$108	$370	$87	$298
1932	97	395	81	330
1934	76	337	67	297
1936	88	376	74	316
1938	100	410	84	344
1940	106	445	88	370
1942	110	414	98	369
1944	125	421	117	394
1946	145	467	136	438
1948	203	511	179	451
1950	259	642	209	518
1952	313	699	244	545
1954	351	766	265	578
1956	388	847	294	642
1958	449	922	341	700
1960	472	943	375	749
1962	530	1,034	419	818
1964	559	1,063	460	875
1966	654	1,202	537	987
1968	786	1,356	658	1,135
1970	955	1,484	816	1,268
1972	1,128	1,609	990	1,412
1974	1,364	1,716	1,207	1,519
1976	1,699	1,798	1,509	1,597
1977 [4]	1,782	1,782	1,578	1,578

[1] Includes current expenditures for day schools, capital outlay, and interest on school debt.

[2] Includes day school expenditures only; excludes current expenditures for other programs.

[3] Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

[4] Estimated.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1977.*

Chart 2.11
Elementary and Secondary Education Expenditures Per Pupil

Even when adjusted for inflation and changing enrollment size, current expenditures have risen substantially over the last two decades.

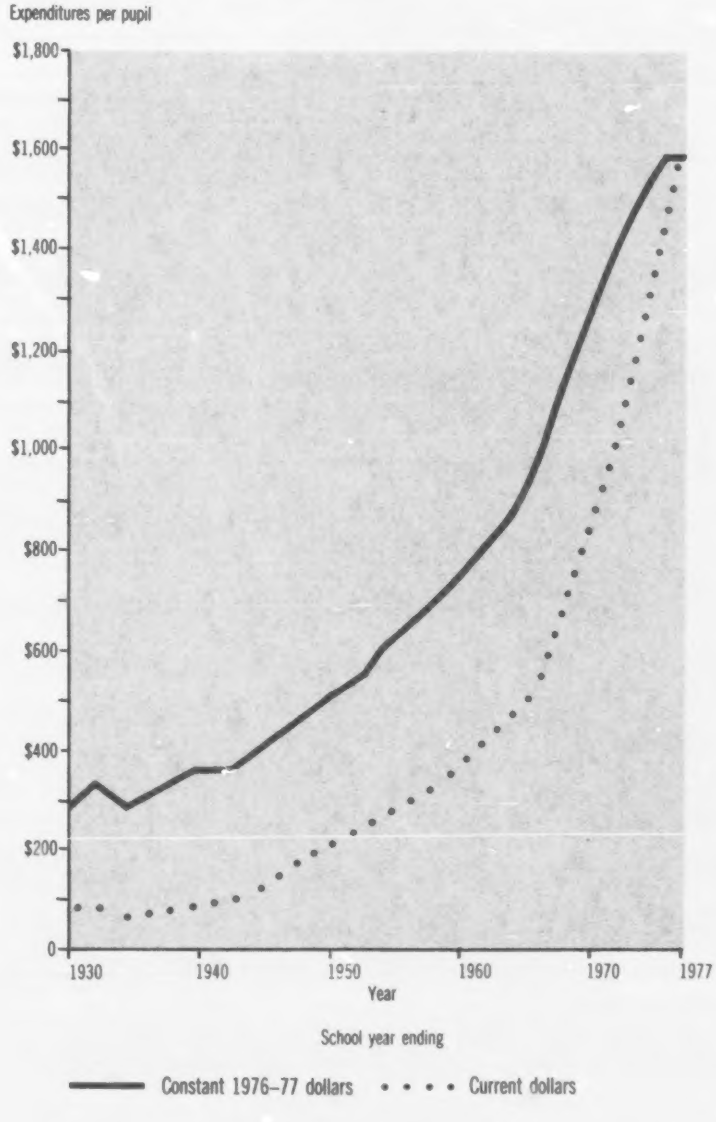

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Table 2.12
Per-pupil revenue for public elementary and secondary education, by source and by State or other area: 1975–76

State or other area	Revenue per pupil									
	Total		Federal		State and local[1]		State		Local[1]	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
United States	$1,715	100.0	$150	8.8	$1,565	91.2	$753	43.9	$812	47.3
Alabama	1,171	100.0	194	16.6	977	83.4	729	62.3	248	21.2
Alaska	3,120	100.0	668	21.4	2,452	78.6	1,933	62.0	519	16.6
Arizona	1,682	100.0	173	10.3	1,509	89.7	768	45.7	741	44.1
Arkansas	1,119	100.0	176	15.7	943	84.3	574	51.3	369	33.0
California	1,755	100.0	146	8.3	1,609	91.7	744	42.4	865	49.3
Colorado	1,752	100.0	129	7.4	1,623	92.6	713	40.7	910	51.9
Connecticut	1,882	100.0	85	4.5	1,797	95.5	611	32.5	1,186	63.0
Delaware	1,958	100.0	189	9.7	1,769	90.3	1,338	68.3	431	22.0
District of Columbia[2] [3]	2,126	100.0	674	31.7	1,452	62.3	1,452	68.3	. . .	. . .
Florida	1,555	100.0	157	10.1	1,397	89.8	810	52.1	587	37.7
Georgia	1,226	100.0	178	14.5	1,048	85.5	577	47.1	471	38.4
Hawaii[3]	1,650	100.0	212	12.8	1,438	87.2	1,438	87.2	. . .	. . .
Idaho	1,306	100.0	119	9.1	1,188	90.9	630	48.2	558	42.7
Illinois	1,770	100.0	123	6.9	1,648	93.1	696	39.3	952	53.8
Indiana	1,477	100.0	94	6.4	1,383	93.6	716	48.5	667	45.2
Iowa	1,650	100.0	89	5.4	1,561	94.6	691	41.9	870	52.7
Kansas	1,618	100.0	130	8.0	1,487	91.9	630	38.9	857	53.0
Kentucky	1,238	100.0	181	14.6	1,056	85.3	687	55.5	369	29.8
Louisiana	1,363	100.0	199	14.6	1,165	85.5	781	57.3	384	28.2
Maine	1,300	100.0	128	9.8	1,172	90.2	561	43.2	611	47.0
Maryland	2,107	100.0	167	7.9	1,939	92.0	864	41.0	1,075	51.0
Massachusetts	2,134	100.0	90	4.2	2,044	95.8	769	36.0	1,275	59.7
Michigan	2,166	100.0	134	6.2	2,032	93.8	974	45.0	1,058	48.8
Minnesota	1,921	100.0	120	6.2	1,801	93.8	1,124	58.5	677	35.2
Mississippi	1,094	100.0	232	21.2	862	78.8	596	54.5	266	24.3
Missouri	1,365	100.0	127	9.3	1,238	90.7	507	37.1	731	53.6
Montana	1,765	100.0	165	9.3	1,600	90.6	899	50.9	701	39.7
Nebraska	1,420	100.0	117	8.2	1,304	91.8	270	19.0	1,034	72.8
Nevada	1,552	100.0	129	8.3	1,423	91.7	581	37.4	842	54.3
New Hampshire	1,430	100.0	83	5.8	1,347	94.2	135	9.5	1,212	84.7
New Jersey	2,157	100.0	133	6.2	2,024	93.8	616	28.6	1,408	65.3
New Mexico	1,445	100.0	333	23.0	1,112	77.0	859	59.4	253	17.5
New York	2,699	100.0	165	6.1	2,534	93.9	1,060	39.3	1,474	54.6
North Carolina	1,283	100.0	175	13.6	1,108	86.4	791	61.7	317	24.7
North Dakota	1,504	100.0	176	11.7	1,329	88.4	657	43.7	672	44.7
Ohio	1,446	100.0	101	7.0	1,344	93.0	571	39.5	773	53.5
Oklahoma	1,309	100.0	163	12.5	1,146	87.6	661	50.5	485	37.1
Oregon	1,985	100.0	154	7.8	1,830	92.2	517	26.0	1,313	66.1
Pennsylvania	1,913	100.0	165	8.6	1,748	91.4	902	47.2	846	44.2
Rhode Island	1,629	100.0	137	8.4	1,492	91.6	544	33.4	948	58.2
South Carolina	1,299	100.0	229	17.6	1,070	82.4	713	54.9	357	27.5
South Dakota	1,362	100.0	174	12.8	1,188	87.2	232	17.0	956	70.2
Tennessee	1,119	100.0	144	12.9	974	87.0	551	49.2	423	37.8
Texas	1,507	100.0	170	11.3	1,337	88.7	738	49.0	599	39.7
Utah	1,384	100.0	126	9.1	1,258	90.9	756	54.6	502	36.3
Vermont	1,618	100.0	114	7.0	1,503	92.9	463	28.6	1,040	64.3
Virginia	1,487	100.0	170	11.4	1,317	88.6	476	32.0	841	56.6
Washington	1,704	100.0	157	9.2	1,547	90.8	1,041	61.1	506	29.7
West Virginia	1,288	100.0	157	12.2	1,131	87.8	700	54.3	431	33.5
Wisconsin	1,757	100.0	89	5.1	1,667	94.9	641	36.5	1,026	58.4
Wyoming	1,951	100.0	139	7.1	1,812	92.9	604	31.0	1,208	61.9
Outlying areas:										
American Samoa	908	100.0	401	44.2	508	55.9	508	55.9	. . .	. . .
Canal Zone	1,642	100.0	1,642	100.0	. . .	. . .	. . .	. . .	. . .	. . .
Guam	1,794	100.0	489	27.3	1,305	72.7	1,305	72.7	. . .	. . .
Puerto Rico	623	100.0	172	27.6	451	72.4	451	72.4	. . .	. . .
Virgin Islands	1,569	100.0	214	13.6	1,355	86.4	1,355	86.4	. . .	. . .

[1] Local revenues include revenues from the intermediate level.

[2] Revenues from Federal sources for the District of Columbia include 17.6 percent of the revenues from local sources, since that percentage of the general revenues of the District of Columbia was received from the Federal Government in FY 1976.

[3] In Hawaii and the District of Columbia, the local school system encompasses the entire political subdivision. Therefore, for these two school systems, all revenues from other than Federal sources are classified as from State sources.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Education, 1975–1976*, forthcoming.

Chart 2.12
Per-Pupil Revenue for Elementary and Secondary Education by Source

States vary considerably in the amounts of funds they allocate to public elementary and secondary education. Federal funding helps to reduce these interstate disparities because the poorest States tend to receive somewhat greater shares than the wealthier ones.

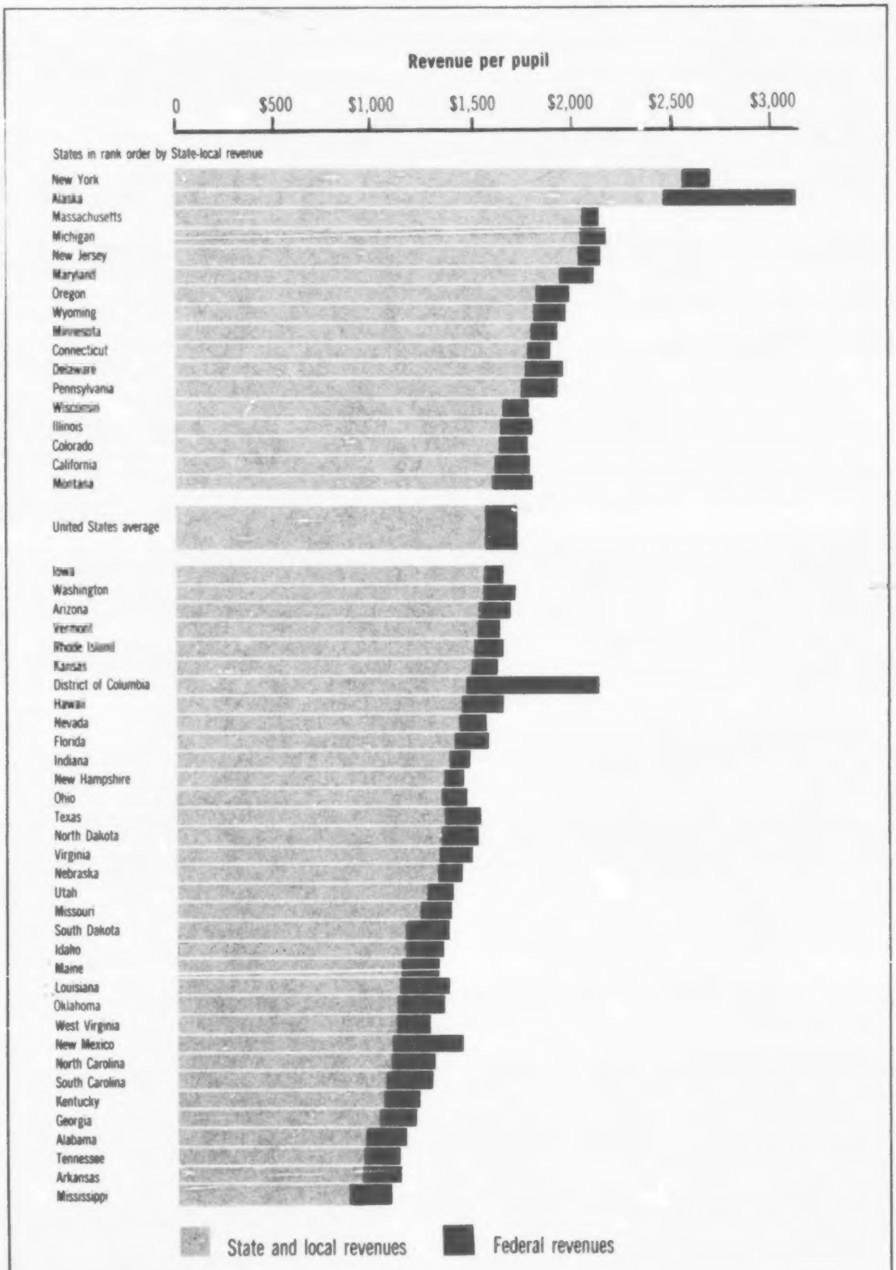

Table 2.13
Within-State disparities in current per-pupil expenditures[1] in 1975 and change from 1970

States ranked by degree of disparity from high to low	1975 disparity index (95:5 percentile ratio)[2]	1975 disparity index as a percent of 1970 disparity index	Change in disparities[3]
Georgia	2.41	130	INC
Connecticut[4]	2.29	103	—
Massachusetts	2.19	112	INC
California[4]	2.02	109	—
Vermont	1.99	59	DEC
Montana[4]	1.97	103	INC
New Jersey	1.95	101	—
Illinois[4]	1.90	93	DEC
Tennessee	1.90	99	—
Kentucky	1.86	109	INC
New York	1.85	113	INC
Washington	1.83	110	INC
Wyoming	1.82	116	INC
Mississippi	1.80	105	INC
Texas[4]	1.79	94	DEC
Arkansas	1.78	92	—
New Hampshire	1.78	94	DEC
Ohio[4]	1.78	100	—
Virginia	1.78	108	INC
Colorado[4]	1.77	101	—
Maryland	1.77	111	INC
Missouri	1.73	94	DEC
Nebraska	1.73	106	INC
Arizona[4]	1.71	91	DEC
Michigan[4]	1.71	95	DEC
Delaware	1.70	82	—
Maine[4]	1.67	107	—
Kansas[4]	1.65	89	DEC
S. Carolina	1.65	99	—
Minnesota[4]	1.62	111	INC
Wisconsin[4]	1.59	100	—
Rhode Island	1.58	90	DEC
Pennsylvania	1.57	100	—
North Dakota[4]	1.53	79	DEC
Idaho	1.51	102	INC
N. Carolina	1.51	101	—
Oklahoma	1.51	91	—
Indiana[4]	1.50	94	—
Oregon	1.50	100	—
South Dakota	1.50	88	DEC
West Virginia	1.49	100	—
Alabama	1.43	100	—
New Mexico[4]	1.41	94	DEC
Iowa[4]	1.34	74	DEC
Louisiana	1.32	99	—
Florida[4]	1.30	85	DEC
Alaska	1.29	99	—
Utah[4]	1.27	100	—
Nevada	1.18	98	DEC
Hawaii	1.00	—	—

[1] Excluding Federal support except for Federal impact aid.

[2] The ratio of expenditures at the 95th percentile of students to expenditures at the 5th percentile is used as an index of expenditure disparities at the extremes. The exclusion of the highest and the lowest 5 percent is intended to allow for circumstances that might justify some extreme unevenness in the distribution of resources. For example, a value of 2.5 means that, that systems at the 95th percentile spend two and one-half times the expenditures per-pupil as those at the 5th percentile.

[3] An increase is indicated by percents of 102 and above and a consistent result on an alternate measure. A decrease is indicated by percents of 98 and below and a consistent result on an alternate measure.

[4] States having reformed their school finance systems between 1970 and 1975. New Jersey is not included because its reform program was not funded until the 1976–77 school year.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of the Assistant Secretary for Planning and Evaluation, *School Finance Reform in the Seventies: Achievements and Failures*, September, 1977.

Chart 2.13
Change in Within-State Disparities in Per-Pupil Expenditures from 1970 to 1975

Disparities between rich and poor school systems have diminished in about half the States that have enacted financial reforms and fewer than 20 percent of the States without reform programs. In 11 of the 29 nonreform States, disparities have actually increased since 1970.

	Changes in disparities		
	Decreased	No change	Increased
School Finance Reform States:		[illegible]	Montana Minnesota
Non-reform States:		Tennessee Arkansas Delaware South Carolina Pennsylvania North Carolina Oklahoma Oregon West Virginia Alabama Louisiana Alaska	Georgia Massachusetts Kentucky New York Washington Wyoming Mississippi Virginia Maryland Nebraska Idaho

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Table 2.14

Ratios of per-pupil revenues and expenditures of large city school systems to their State's average per-pupil revenues and expenditures: School year ending 1968 and 1975

Item	Ratio of per-pupil finances of large city school systems to their State's per-pupil finances		Percent of systems with per-pupil finances equal or greater than their State's average		Percentage distribution of systems by change in ratio from 1968 to 1975		
	1968 [1]	1975 [2]	1968	1975	Increased	Decreased	No change
Total revenues	0.95	1.13	**38**	**78**	85	15	0
Local revenues	1.07	1.14	**65**	**64**	56	39	5
State revenues	0.82	1.03	**18**	**50**	85	14	1
Federal revenues	1.12	1.80	**50**	**86**	93	5	3
ESEA Title I	1.46	1.87	68	83	76	24	0
School Lunch Program	0.71	1.58	20	84	93	7	0
Total current expenditures allocable to pupils	1.02	1.13	**53**	**74**	78	21	1
Administration	0.92	1.11	**28**	**55**	74	25	1
Instruction	1.07	1.13	**79**	**79**	66	33	1
Transportation	0.32	0.62	**1**	**14**	86	11	3

[1] The 1967–68 figures are computed using ratios of average daily attendance. They are taken from *Finances of Large City School Systems—A Comparative Analysis*, by L. H. Fox and G. E. Hurd, 1971.

[2] The 1974–75 figures are computed using ratios of average daily membership.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Finances of Large City School Systems*, forthcoming.

Chart 2.14
Revenue and Expenditure Patterns of Large City School Systems

In 1974–75, more large city school systems received funding at or above their State's average than in 1967–68. Most of the increased funding came from State and Federal sources.

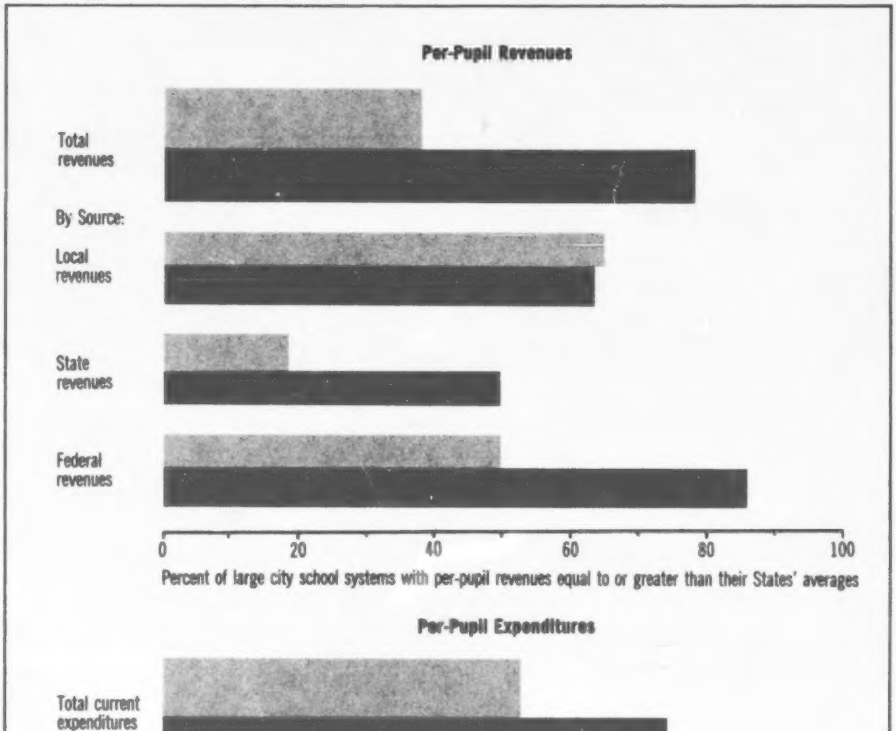

Table 2.15
Average ratios of per-pupil finances of large city school systems to their State's average per-pupil finances, by percent black enrollment and by city poverty rate: School year ending 1975

Item	Total	Percent black enrollment					City poverty rate				
		High	Medium-high	Medium	Medium-low	Low	High	Medium-high	Medium	Medium-low	Low
SELECTED RECEIPTS:											
Total revenues	1.12	1.22	1.11	1.15	1.05	1.06	1.17	1.13	1.09	1.08	1.08
Local	1.14	1.24	1.07	1.14	1.13	1.11	1.23	0.99	1.13	1.17	1.18
State	1.06	1.14	1.09	1.12	0.95	1.01	1.08	1.24	1.02	0.94	0.95
Federal	1.74	2.21	1.94	1.92	1.23	1.40	1.71	2.04	1.68	1.62	1.55
ESEA	1.80	2.43	1.88	2.17	1.28	1.27	1.86	2.23	1.71	1.47	1.55
PL 874	0.59	0.39	0.46	0.47	1.02	0.59	0.41	0.30	0.77	0.94	0.84
Vocational education	1.50	0.95	2.17	2.40	1.26	0.73	0.62	1.12	2.28	1.86	1.95
School lunch	1.54	1.94	1.76	1.76	1.15	1.10	1.70	1.85	1.56	1.21	1.17
Gross school lunch sales	1.03	0.81	1.04	1.45	1.04	0.81	1.09	0.98	1.09	1.13	0.76
SELECTED EXPENDITURES:											
Total current	1.13	1.23	1.10	1.16	1.08	1.07	1.15	1.18	1.08	1.07	1.13
Administration	1.11	1.33	1.15	1.14	0.95	0.97	1.30	1.19	0.94	1.04	1.02
Instruction	1.13	1.21	1.09	1.14	1.10	1.10	1.14	1.16	1.08	1.08	1.14
Public transportation	0.60	0.42	0.63	0.90	0.57	0.48	0.48	0.69	0.66	0.52	0.63
Operation and maintenance	1.21	1.48	1.20	1.16	1.10	1.13	1.34	1.22	1.15	1.11	1.20
Capital outlay	1.13	0.68	1.08	1.44	1.10	1.34	0.67	1.26	1.08	1.42	1.59
Debt service	0.90	1.07	0.67	0.77	0.86	1.14	0.83	1.11	0.76	0.83	0.97
Principal	1.02	1.41	0.90	0.77	0.86	1.14	0.81	1.62	0.84	0.91	0.92
Interest	0.96	1.26	0.78	0.80	0.76	1.20	0.85	1.34	0.64	0.92	1.04
OUTSTANDING DEBT:											
Total	0.99	1.19	0.88	0.83	0.90	1.14	0.81	1.38	0.73	0.96	1.12
Long-term debt	0.94	1.09	0.87	0.77	0.87	1.10	0.81	1.32	0.66	0.82	1.06

[1] Cities were divided into fifths based on black enrollment as a percent of total enrollment in 1974 using data collected by the Office of Civil Rights, DHEW. The ranges of the fifths are as follows: 'High' black represents cities with black enrollment from 90.43 percent to 57.40 percent; 'Medium-high' black from 54.20 to 39.66 percent; 'Medium' black from 38.15 to 24.23 percent; 'Medium-low' black from 20.39 to 13.11 percent; and 'Low' black from 12.94 to 1.56 percent.

[2] Cities were divided into fifths based on the percentage of families in 1970 that had incomes below the national poverty level as defined by the Office of Management and Budget. The ranges of the fifths are as follows: 'High' poverty represents cities with poverty rates from 21.6 percent to 13.3 percent; 'Medium-high' poverty represents 12.9 percent to 10.6 percent; 'Medium' poverty represents 10.6 to 9.3 percent; 'Medium-low' represents 9.2 to 8.1 percent; 'Low' poverty from 7.7 to 3.1 percent.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Finances of Large City School Systems*, forthcoming.

Chart 2.15
Financial Support for Large City School Systems by Black Enrollment and Poverty Rate

Large city school districts receive higher per-pupil revenues from Federal sources than do other districts in their States. Compared to other large cities, those with higher percentages of black enrollment and higher poverty rates receive larger shares of Federal funds.

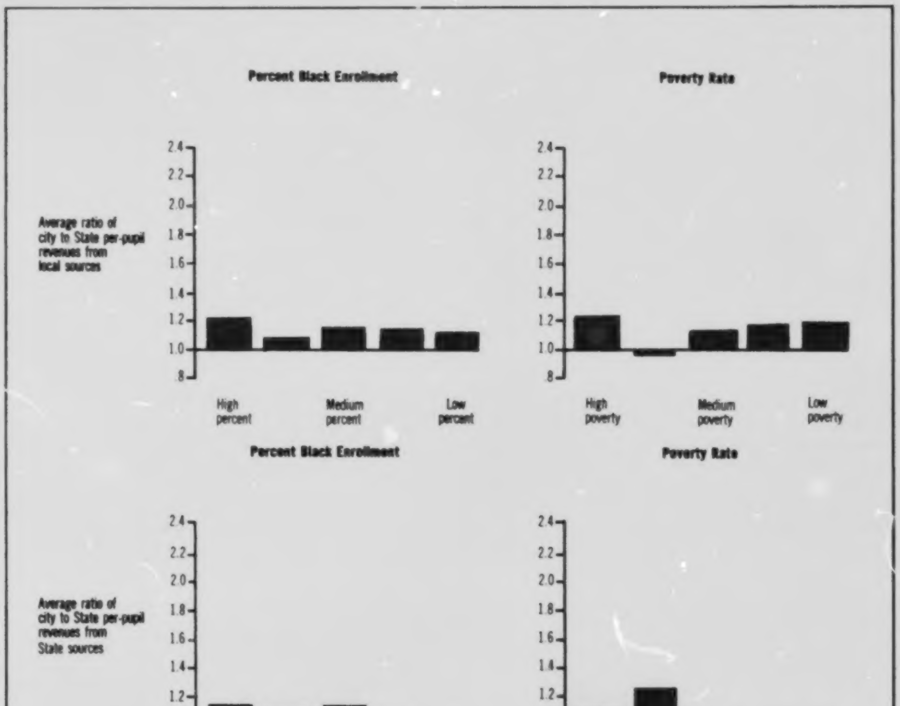

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Table 2.16
Number of elementary and secondary schools, by control of school: 1929–30 to 1974–75

School year ending	Total			Public				Nonpublic	
				Elementary					
	All	Elementary	Secondary	Total	One-teacher	Other	Secondary	Elementary	Secondary
1930	274,769	247,581	27,188	**238,306**	**149,282**	**89,024**	**23,930**	**9,275**	**3,258**
1932	272,182	242,484	29,698	**232,750**	**143,391**	**89,359**	**26,409**	**9,734**	**3,289**
1934	274,269	246,228	28,041	**236,236**	**139,166**	**97,070**	**24,714**	**9,992**	**3,327**
1936	271,145	242,166	28,979	**232,174**	**131,101**	**101,073**	**25,652**	**9,992**	**3,327**
1938	260,446	231,652	28,794	**221,660**	**121,178**	**100,482**	**25,467**	**9,992**	**3,327**
1940	(NA)	(NA)	(NA)	**(NA)**	**113,600**	**(NA)**	**(NA)**	**11,306**	**3,568**
1942	221,531	193,397	28,134	**183,112**	**107,692**	**75,420**	**25,123**	**10,285**	**3,011**
1944	212,174	180,190	31,984	**169,905**	**96,302**	**73,603**	**28,973**	**10,285**	**3,011**
1946	197,698	170,090	27,608	**160,227**	**86,563**	**73,664**	**24,314**	**9,863**	**3,294**
1948	185,607	156,831	28,776	**146,760**	**75,096**	**71,664**	**25,484**	**10,071**	**3,292**
1950	166,473	138,600	27,873	**128,225**	**59,652**	**68,573**	**24,542**	**10,375**	**3,331**
1952	161,497	134,429	27,068	**123,763**	**50,742**	**73,021**	**23,746**	**10,666**	**3,322**
1954	152,164	122,614	29,550	**110,875**	**42,865**	**68,010**	**25,637**	**11,739**	**3,913**
1956	146,732	116,799	29,933	**104,427**	**34,964**	**69,463**	**26,046**	**12,372**	**3,887**
1958	138,012	108,511	29,501	**95,446**	**25,341**	**70,105**	**25,507**	**13,065**	**3,994**
1960	135,272	105,427	29,845	**91,853**	**20,213**	**71,640**	**25,784**	**13,574**	**4,061**
1962	126,151	96,672	29,479	**81,910**	**13,333**	**68,577**	**25,350**	**14,762**	**4,129**
1964	(NA)	(NA)	30,882	**77,584**	**9,895**	**67,689**	**26,431**	**(NA)**	**4,451**
1966	119,759	88,556	31,203	**73,216**	**6,491**	**66,725**	**26,597**	**15,340**	**4,606**
1968	117,090	85,779	31,311	**70,879**	**4,146**	**66,733**	**27,011**	[1] **14,900**	[1] **4,300**
1971 [2]	109,294	80,172	29,122	**65,800**	**1,815**	**63,985**	**25,352**	**14,372**	**3,770**
1974	108,676	79,070	29,606	**65,070**	**1,365**	**63,705**	**25,906**	[1] **14,000**	[1] **3,700**
1975	107,016	77,619	29,397	[3] **63,619**	**1,247**	**62,372**	[3] **25,697**	[1] **14,000**	[1] **3,700**
1976	106,272	77,242	29,030	[3] **63,242**	**1,166**	**62,076**	[3] **25,330**	[1] **14,000**	[1] **3,700**

NA: Not available.

[1] Data estimated.
[2] After 1968, years of data collection changed.
[3] Excludes special education schools for the handicapped (not reported by level).

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1976.*

Chart 2.16
Public and Nonpublic Elementary and Secondary Schools

Over the past 40 years, larger enrollments have been accommodated by increasing the size rather than the number of schools.

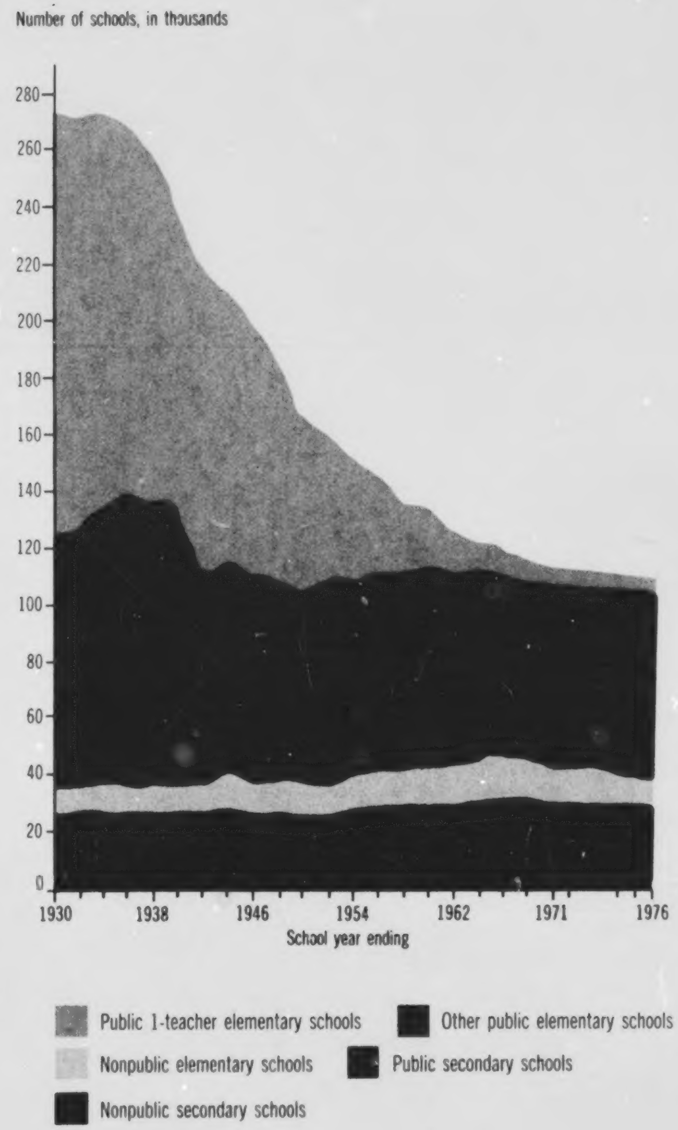

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Table 2.17
Number of State board of education members, State department of education staff members, local education agencies, and local board of education members: School year ending, 1962 to 1976

Item	School year ending 1962	1964	1966	1968	1970	1972	1974
State board of education members[1]	468	492	500	523	535	567	567
State department of education staff members	11,041	11,466	15,691	19,189	19,893	22,268	22,394
Local education agencies:							
Number of agencies	35,676	31,705	20,983	22,010	19,169	17,289	16,700
Number of board members	155,754	141,674	126,226	112,064	99,656	98,003	95,547

[1] Includes ex officio members and members who also serve on a State board of vocational education.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Statistics of State School Systems*, various years.

Chart 2.17
Trends in State and Local Education Administrative Organization

Although the numbers of agencies and school board members serving at the local level have declined since 1962, the number of staff in State education departments has more than doubled.

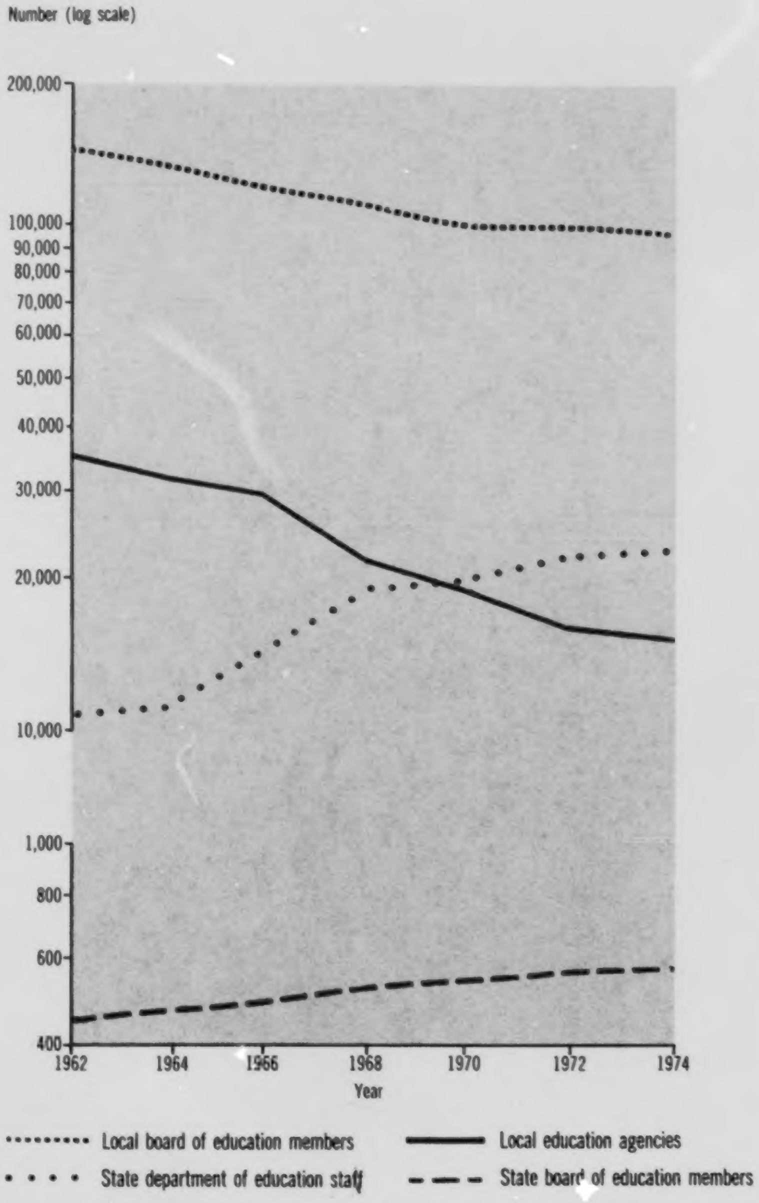

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Table 2.18
Number of nonpublic elementary and secondary schools and percent participating in Federal assistance programs, by affiliation: School year ending, 1977

Affiliation	Total number of schools	Program participation					
		One or more		ESEA*		Food and milk	
		Number	Percent	Number	Percent	Number	Percent
All schools	14,757	12,083	81.9	11,154	75.6	8,564	58.0
Not affiliated	**2,210**	**1,129**	51.1	900	40.7	588	26.6
Affiliated	**12,547**	**10,954**	87.3	10,254	81.7	7,976	63.6
Baptist	310	49	**15.8**	36	11.6	19	6.1
Calvinist	182	167	**91.8**	159	87.4	158	86.8
Roman Catholic	8,986	8,846	**98.4**	8,567	95.3	6,313	70.3
Episcopal	304	187	**61.5**	156	51.3	105	34.5
Jewish	264	240	**90.9**	210	79.5	187	70.8
Lutheran	1,366	1,055	**77.2**	850	62.2	920	67.3
Seventh Day Adventist	517	111	**21.5**	41	7.9	90	17.4
Other	618	299	**48.4**	235	38.0	184	29.8

*Schools participating in one or more programs authorized by the Elementary and Secondary Education Act, as amended.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Nonpublic School Statistics, 1976-77, Advance Report.*

Chart 2.18
Participation by Nonpublic Schools in Federal Programs

More than 87 percent of religiously affiliated nonpublic schools participate in Federal programs, compared to 51 percent of nonpublic schools with no religious affiliation.

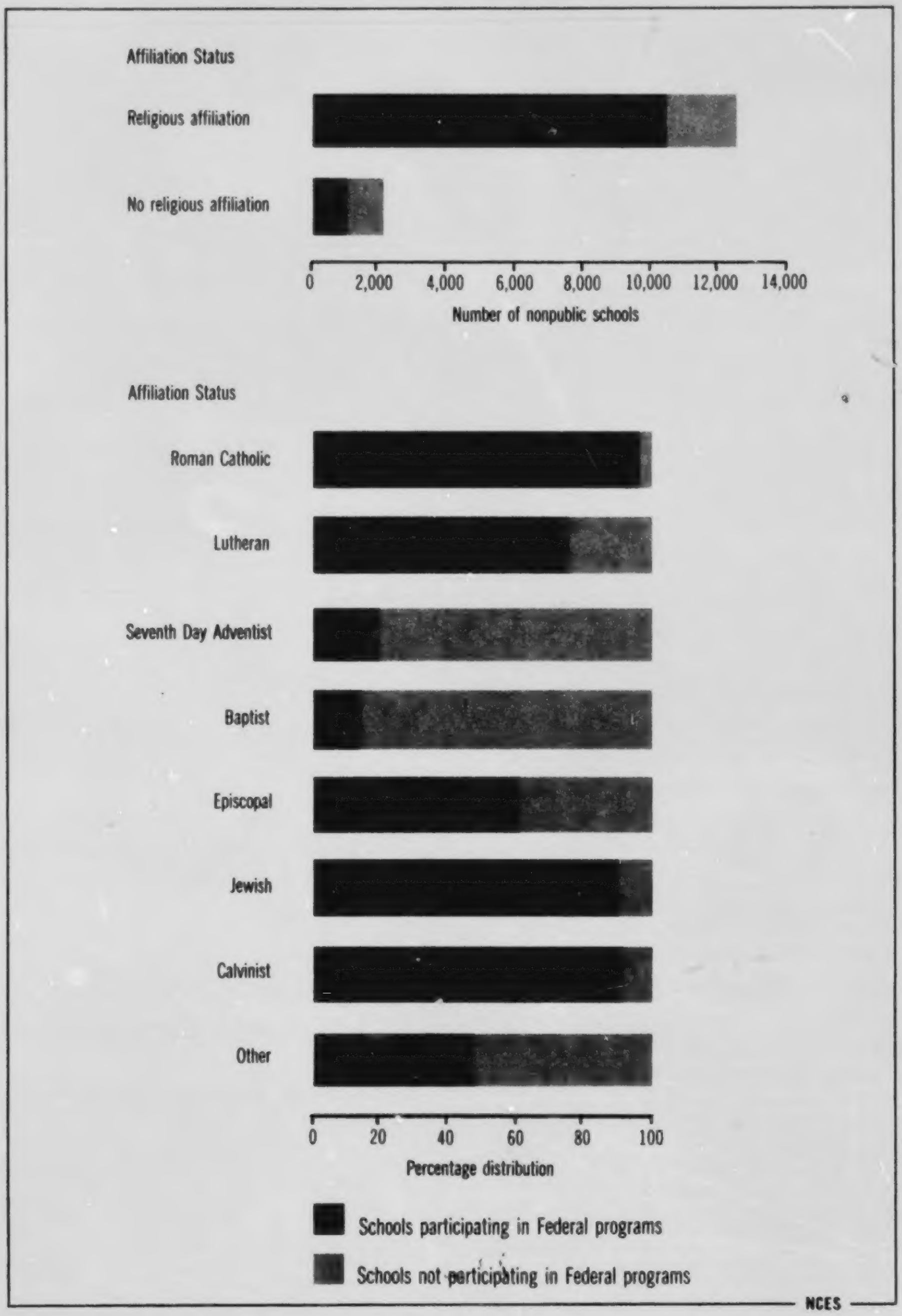

Table 2.19
Availability of instructional television programming reported by public school teachers and their attitudes toward instructional television: School year ending 1977

Availability of instructional television programming	Percentage distribution of responses of public school teachers			
	Total	Available	Unavailable	
All levels	100	72	28	
Elementary schools	100	75	25	
Middle schools and junior high schools	100	64	36	
High schools	100	72	28	
Attitudes toward instructional television programming	**Total**	**Agree**	**Neutral**	**Disagree**
Instructional television shows great possibilities for stimulating teacher creativity	100	53	40	7
The use of instructional television makes any subject matter more interesting	100	50	39	11
Teachers don't make enough use of instructional television	100	49	44	7
Instructional television inspires students to greater curiosity and learning	100	48	46	6
Instructional television is all right but I feel it has been overemphasized	100	12	50	38
The personal relationship between student and teacher is lost when instructional television is used	100	12	33	54
Children watch enough television at home; they don't need to watch more in school	100	10	39	52
Teachers, when using instructional television, lose some of their importance in the classroom setting	100	8	29	63
The development of more new instructional television programs is a waste of time	100	2	20	77

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, and Corporation for Public Broadcasting, *School TV Utilization Study, 1977,* forthcoming.

Chart 2.19
Availability of Instructional Television (ITV) and Teachers' Attitudes Toward ITV

Instructional television is currently available to a majority of public school teachers. Almost half of the teachers polled believe it is not used enough.

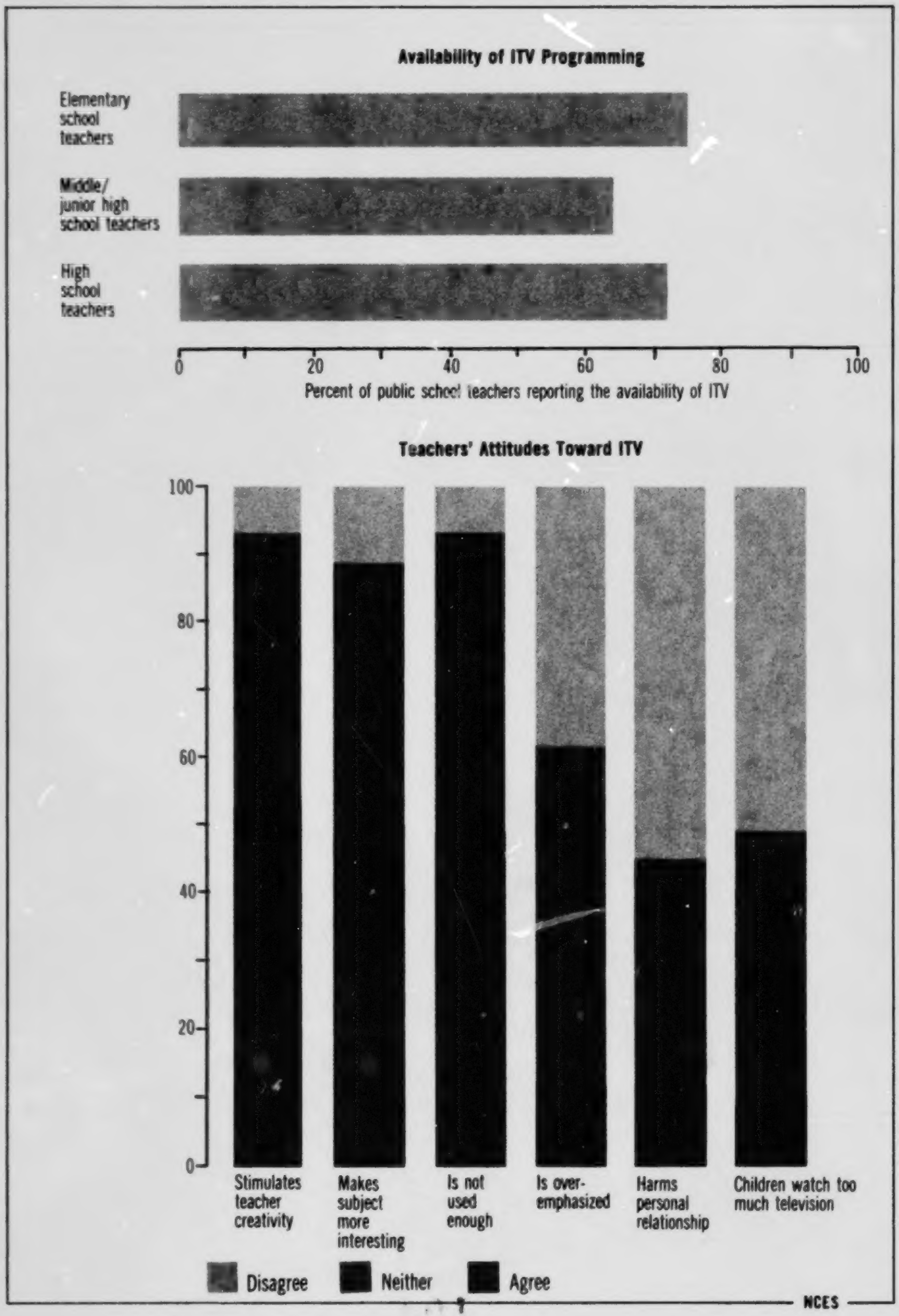

Table 2.20
Number and percent of schools reporting criminal offenses [1] to the police in a 5 month period, by type of offense and level and location of school: September 1974 through January 1975

Item	All schools	Elementary				Secondary			
		Total	Metro-politan, central city	Metro-politan, other	Non-metro-politan	Total	Metro-politan, central city	Metro-politan, other	Non-metro-politan
Total schools [2]	94,329	72,164	14,532	30,198	27,434	22,165	3,966	8,099	10,100
Number of schools reporting one or more offenses	46,349	30,245	8,137	12,541	9,566	16,104	3,284	6,615	6,204
Percent of schools reporting one or more offenses	49.0	41.0	**56.0**	**41.0**	**34.0**	72.0	**82.0**	**81.0**	**61.0**
Percent of schools reporting, by type of offense:									
Rape	0.23	0.15	0.07	0.23	0.11	0.49	1.02	0.38	0.38
Robbery	3.25	1.81	4.87	1.22	0.84	7.95	16.18	9.51	3.46
Assault	7.98	3.96	10.61	3.09	1.39	21.07	40.54	24.72	10.50
Personal theft	14.91	9.31	14.73	9.18	6.59	33.14	44.05	38.39	24.64
Burglary	34.15	30.43	41.69	28.92	26.11	46.28	58.04	52.87	36.37
Arson	3.73	2.00	4.88	1.58	0.94	9.35	14.84	12.80	4.43
Bombing	6.70	3.92	7.08	3.51	2.69	15.76	20.68	20.46	10.06
Disorderly conduct	8.36	5.13	9.19	4.53	3.65	18.88	24.83	22.25	13.84
Drug abuse	10.54	3.40	2.11	5.04	2.27	33.77	40.63	44.10	22.79
Alcohol abuse	5.26	1.68	1.78	2.16	1.09	16.91	15.65	20.16	14.81
Weapons	4.45	2.20	4.97	2.16	0.77	11.77	25.06	13.59	5.09

[1] Includes only those offenses committed on school premises. Offenses may involve non-students as offender or victim.

[2] Public and nonpublic schools excluding those that combine elementary and secondary grades.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Safe School Study".

Chart 2.20
Schools Reporting Criminal Offenses to Police

Within a 5-month period, 49 percent of all schools reported one or more criminal offenses to the police. More than two-thirds of the secondary schools reported offenses; most often, these were burglary, theft, and drug abuse cases.

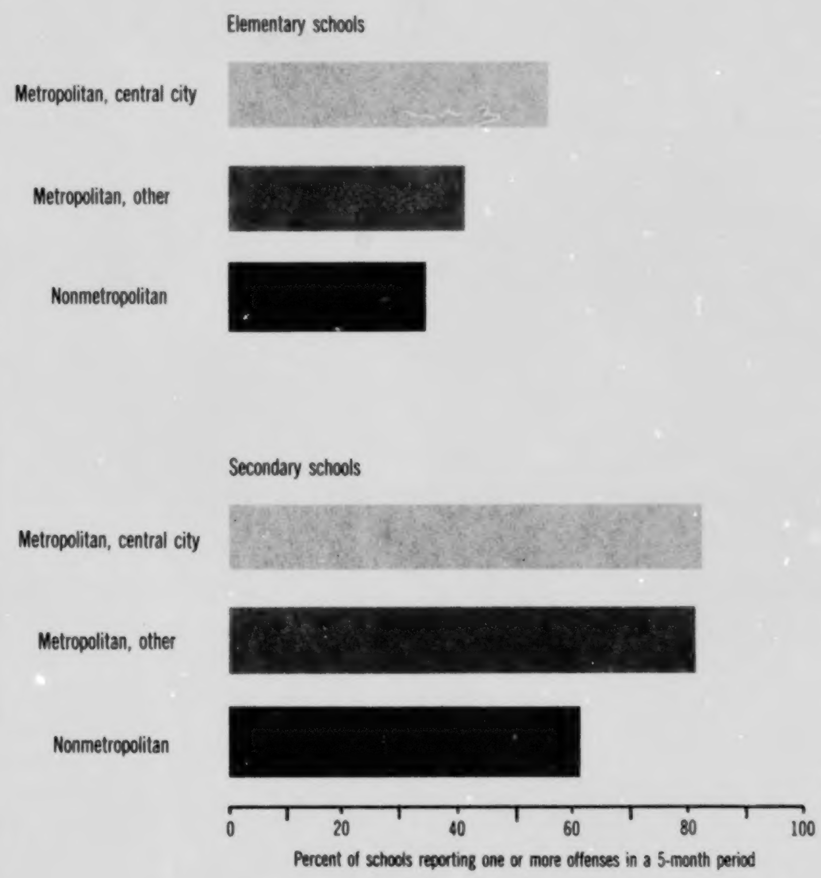

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Table 2.21
Number of graduates of public and nonpublic high schools and number of recipients of high school equivalency certificates: School year ending 1960 to 1976

Item	School year ending								
	1960	1962	1964	1966	1968	1970	1972	1974	1976
	(In thousands)								
Total high school graduates* . . .	**1,864**	**1,925**	**2,290**	**2,632**	**2,702**	**2,896**	**3,008**	**3,081**	**3,153**
Public high school graduates . . .	1,633	1,685	2,015	2,334	2,402	2,596	2,706	2,771	2,842
Nonpublic high school graduates .	231	240	275	298	300	300	302	310	310
High school equivalency recipients .	**52**	**55**	**75**	**90**	**97**	**142**	**180**	**186**	**262**

*Includes regular public and nonpublic schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and federally operated schools on Federal installations.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Statistics to 1986–87*, preliminary data, and *Statistics of Public Elementary and Secondary Day Schools, Fall*, various years.

Chart 2.21
High School Completions

The number of persons receiving high school equivalency certificates has quadrupled since 1960, while the number of students graduating from public and nonpublic high schools has increased by two-thirds.

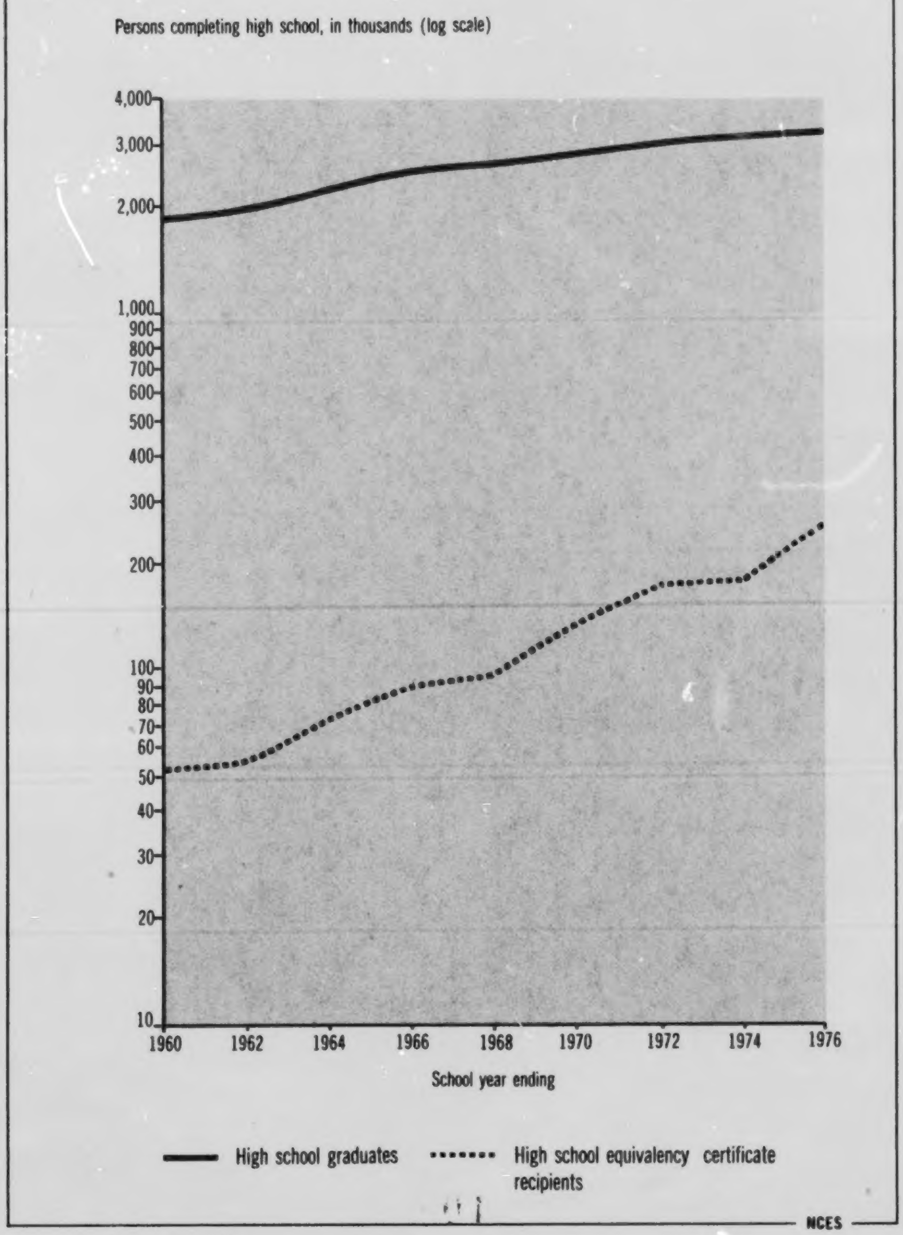

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Table 2.22
Differences from national mean scores in learning areas, by age and racial/ethnic group: Various years

Race/ethnicity	9-year-olds		13-year-olds		17-year-olds in school	
	Percentage point difference from mean achievement score	Standard error of the difference	Percentage point difference from mean achievement score	Standard error of the difference	Percentage point difference from mean achievement score	Standard error of the difference
			Social Studies (1971–72)			
White	**2.73**	0.30	**2.07**	0.20	**2.39**	0.21
Black	**– 12.16**	0.62	**– 12.42**	0.79	**– 13.56**	0.56
Hispanic	**– 10.59**	1.03	**– 10.05**	0.66	**– 13.12**	1.13
			Science (1972–73)			
White	**3.12**	0.25	**3.49**	0.32	**2.13**	0.20
Black	**– 13.36**	0.58	**– 16.63**	0.60	**– 10.32**	0.61
Hispanic	**– 9.53**	0.86	**– 11.55**	0.85	**– 11.08**	1.08
			Mathematics (1972–73)			
White	**2.76**	0.24	**3.74**	0.35	**3.63**	0.32
Black	**– 12.38**	0.54	**– 18.23**	0.68	**– 19.83**	0.60
Hispanic	**– 7.77**	0.83	**– 11.71**	1.00	**– 14.36**	1.02
			Career and Occupational Development (1973–74)			
White	**3.23**	0.26	**3.50**	0.34	**2.19**	0.19
Black	**– 14.21**	1.18	**– 18.77**	0.72	**– 15.96**	0.89
Hispanic	**– 14.08**	1.77	**– 12.44**	1.59	**– 7.65**	2.08
			Reading (1974–75)			
White	**2.54**	0.21	**2.73**	0.22	**2.78**	0.22
Black	**– 10.94**	0.58	**– 13.95**	0.61	**– 16.44**	0.74
Hispanic	**– 10.77**	1.11	**– 11.25**	1.38	**– 11.42**	1.54

NOTE: All differences from the national mean scores are significant at the 0.05 level.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Hispanic Student Achievement in Five Learning Areas: 1971–75*, 1977.

Chart 2.22
Achievement in Subject Areas by Age and Racial/Ethnic Group

In all age groups, blacks and Hispanics performed below the national means on achievement tests in five learning areas.

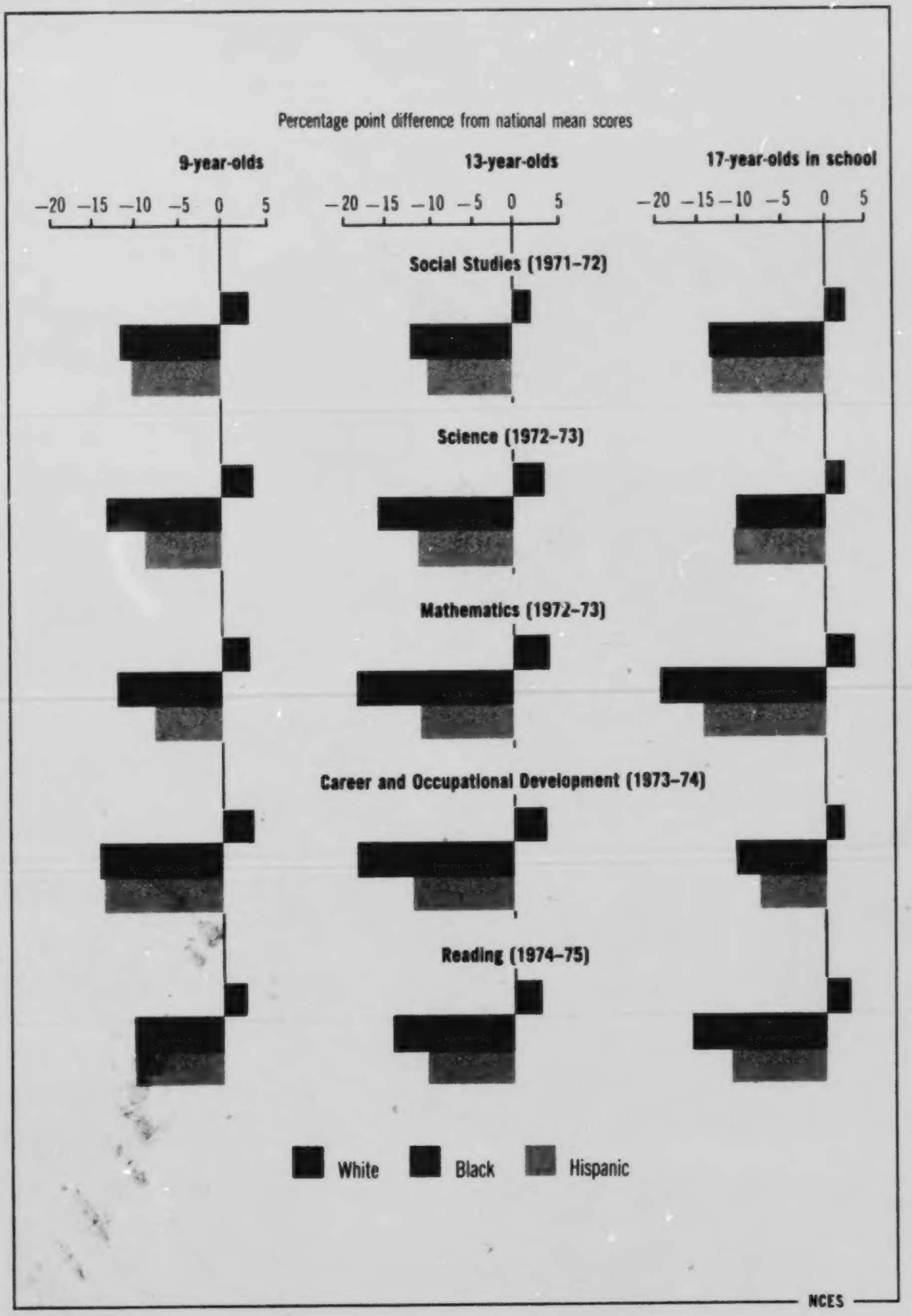

Table 2.23
Reading performance by age, race, and region: 1971 and 1975

Race and region	Mean percent correct								
	9-year-olds			13-year-olds			17-year-olds in school		
	1971	1975	Mean change	1971	1975	Mean change	1971	1975	Mean change
Total	63.98	65.20	*1.22	60.60	60.74	0.14	72.12	72.00	−0.12
White students	66.44	67.67	*1.23	63.27	63.53	0.26	74.38	74.80	0.42
Northeast, Central or West region	67.03	68.31	*1.28	64.10	64.13	0.03	74.96	75.15	0.19
Southeast region	63.92	65.15	1.23	60.23	61.26	1.03	71.70	73.14	1.44
Black students	49.70	54.51	*4.81	45.55	46.39	0.84	55.21	55.43	0.22
Northeast, Central or West region	52.81	55.59	2.78	48.67	47.17	−1.50	57.98	56.68	−1.30
Southeast region	45.43	53.09	*7.66	40.96	45.58	*4.62	51.13	54.10	2.97

* Statistically significant at the 0.05 level.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Assessment of Educational Progress, unpublished data.

Chart 2.23
Reading Performance by Race and Region in 1971 and 1975

Reading performance of blacks improved in the Southeast from 1971 to 1975, particularly among the youngest age group. Among blacks in other regions, performance declined slightly among 13- and 17-year-olds.

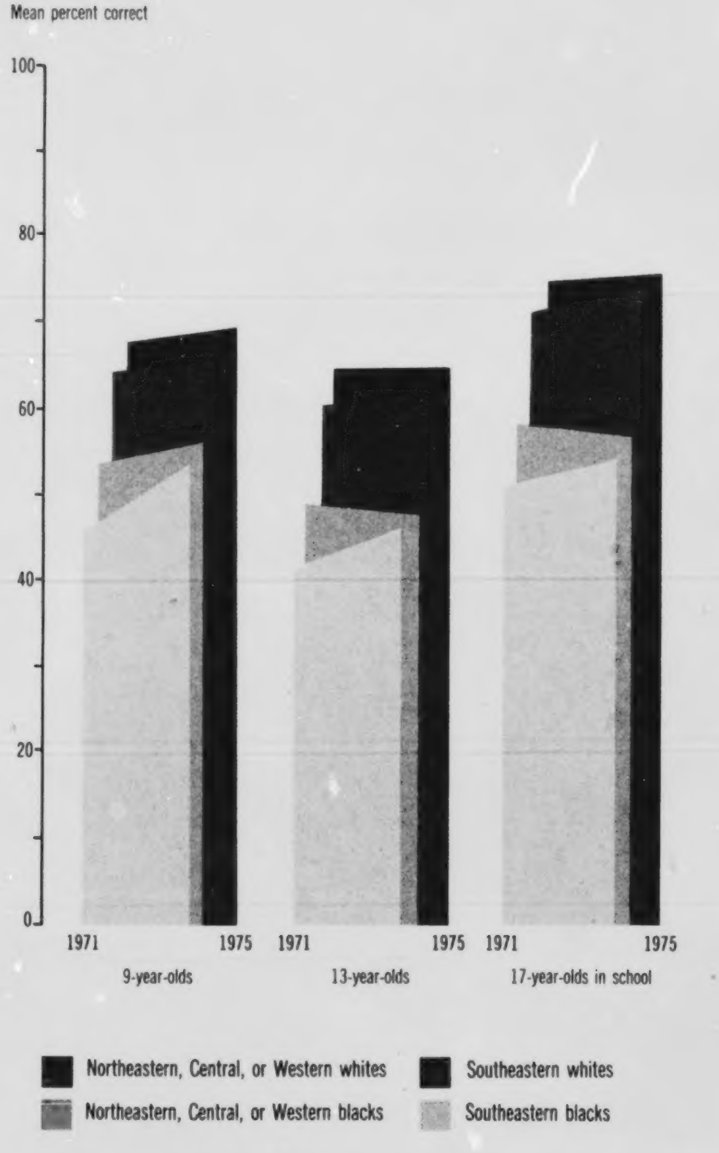

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Table 2.24
Explanatory and persuasive letter writing assessment: Job application letter exercise, by age group: 1974

The task posed was to write a job application letter in response to a want-ad. The letter was then assessed in terms of its content and format.

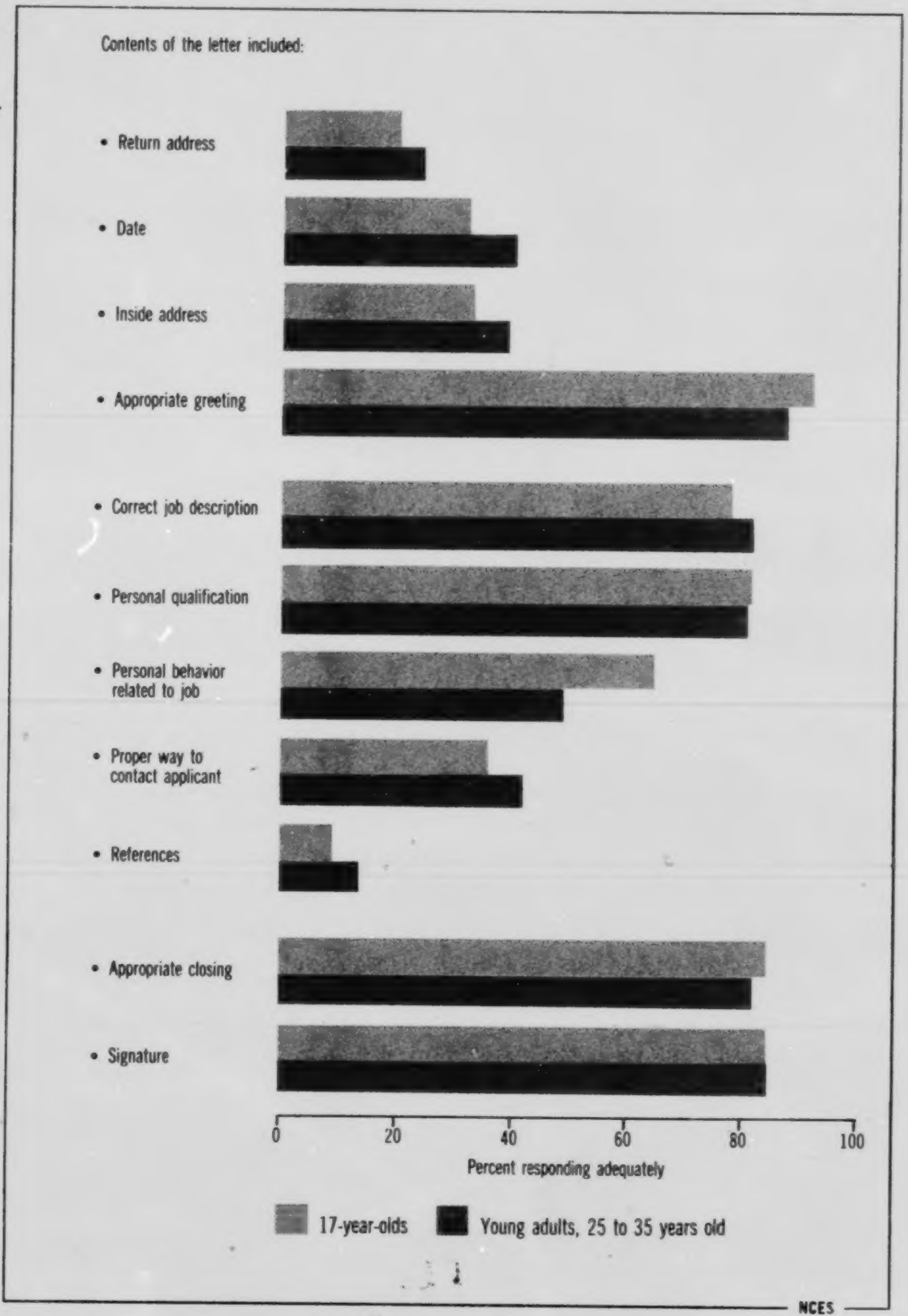
Responses	Percent responding adequately by age group	
	17-year-olds	Young adults[1]
Content:		
Correctly gives job description	78	82
Describes qualifications	82	81
Provides references	9	14
Shows willingness to interview	16	26
Provides proper way to contact	36	42
Asks for more information	8	4
Gives reason to consider application	10	7
Gives personal behavior related to job	65	49
Format:		
Return address	20	24
Date	32	40
Inside address	33	39
Appropriate greeting	92	88
Appropriate closing	85	82
Signature	85	85
All the above	8	13

[1] Persons 25 to 35 years old.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Assessment of Educational Progress, *Explanatory and Persuasive Letter Writing.*

Chart 2.24
Writing Performance of 17-Year-Olds and Young Adults: Writing a Job Application Letter

In writing a job application letter, most 17-year-olds and young adults correctly provided a job description and their qualifications yet failed to supply references or tell how they could be contacted.



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Chapter 3
Postsecondary Education

by Jay Noell

Postsecondary education is becoming increasingly extensive and diverse, reflecting many of the developing interests of the American people as well as their perceived needs for education beyond that required by law. One indicator of the size of this sector is the number of people enrolled. Because data on postsecondary education are collected through several different surveys and many people are enrolled in more than one sector of postsecondary education, the total number of individuals enrolled in at least one postsecondary course can only be estimated. It is estimated that in 1975–76 over 22 million people were enrolled in postsecondary courses, with about 11.3 million students participating in higher education, 17.0 million in adult education (including 6.3 million enrolled as part-time students in colleges and universities), and 1.8 million in noncollegiate postsecondary education (primarily vocational or technical in nature). Although these figures give some indication of the involvement of the American people in postsecondary education, they obviously underestimate it since they indicate only those enrolled at one point in time. At some point in their lives, a far larger number (and proportion) of the population participates in postsecondary education.

The diversity of the postsecondary education sector is suggested by the courses that students can take, ranging from research seminars on problems at the frontiers of knowledge to individual tutoring in basic literacy, from classes on occupational or professional skills to courses designed to enhance enjoyment of leisure time. Some of the courses are designed for part-time students, others are only for full-time students. Many, but certainly not all, of the courses are organized into programs that lead to degrees and certificates. Many courses are offered by the traditional institutions of higher education (public and private 2- and 4-year colleges and universities) while proprietary and other vocational, business, and correspondence schools, not to mention employers, professional associations, and labor unions, among others, offer additional courses.

Because of its size and diversity, it is difficult to make meaningful generalizations concerning conditions in postsecondary education as a whole. Rather, it is necessary to examine higher education, adult education, and noncollegiate postsecondary education separately.

The area of greatest public interest in the postsecondary sector since World War II has been higher education. During this time five issues have been of special concern: access to higher education; enrollment growth; financing higher education; the Nation's level of achievement in the physical sciences; and desegregation. Among these issues, the problem of access has probably received the most attention. As early as 1948 the Commission on Higher Education appointed by President Harry Truman pointed out that college enrollment rates were related to family income-levels. By the late 1960's many other national bodies had called attention to additional factors, particularly race, ethnicity, and sex, that appeared to affect access to higher education.

Enrollment growth became of special concern following World War II when enrollments started rising rapidly, stemming from the availability of educational benefits for veterans from the "G.I. Bill of Rights" and from the increasing numbers of college-age youth who had completed high school, were qualified, and wished to attend college. Problems of financing higher education became critical then because funds had to be raised to expand the number and physical capacity of institutions of higher education to cope with enrollment growth. Following the launching of Sputnik I by the Soviet Union, conditions in higher education became of greater concern because of fear that talented youth were not going to college with possible deleterious consequences for the quality of American science and our ability to compete with the rest of the world in scientific achievement. In recent years, the civil rights movement has added greater urgency to the issue of access for minorities, and most recently, for women.

Aspects of the issues of access and enrollment growth are addressed in this chapter within the context of a general description of conditions in higher education. The issue of financing higher education, including a discussion of current Federal student aid programs authorized by the Education Amendments of 1972 and intended to provide equal educational opportunity by broadening access to qualified students from low-income families, is addressed separately in chapter 5.

Interest in Postsecondary Education

Access to higher education is usually discussed in terms of participation rates since data are more readily available on participation than on access. But while participation depends directly on access, the two are not necessarily highly correlated since participation is affected by many factors.

Among the factors which influence an individual's decision to participate in higher education are race or Spanish origin, family income, and years of schooling of family head (entry 3.1). About 49 percent of white high school seniors, for example, report having plans to attend college in 1975, while about 41 percent of black students and about 48 percent of seniors of Spanish origin report such plans. Among high school seniors coming from families having an income of $25,000 and over, about 81 percent plan to attend college; in contrast, only 37 percent of students whose family incomes are under $5,000 have such plans. However, the proportion of students planning to attend vocational schools increases as the level of family income decreases.

Among 18- to 24-year-old high school graduates not enrolled in postsecondary education in 1976, 43 percent of whites, 56 percent of blacks, and 52 percent of Hispanics were reported to be "interested in attending school" by a household respondent (entry 3.2). Within each racial/ethnic group the proportion interested in attending school was greater for members of low-income families ($5,000 or less) than for members of higher income families.

Many reasons are given by freshmen for deciding to go to college (entry 3.3). The reasons most frequently cited by students in 1977 for going to college were to learn more about things of interest (given as a reason by over 79 percent) and to get a better job (77 percent). In 1971, students most frequently had cited getting a better job. Also of interest is the increase in the proportion of students indicating that they are going to college to improve their reading and study skills, which rose from being cited by about 22 percent in 1971 to almost 43 percent in 1977. Finally, only a small change was registered in the proportion of students indicating that one of the reasons they went to college was because their parents wanted them to go. About 29 percent cited this as a reason in 1977, compared with 23 percent in 1971.

Enrollment in Higher Education

While data on the educational plans of students and their reasons for going to college provide insights regarding the bases for deciding to enroll, it is actual enrollment in college that is of greatest significance. In the 1960's enrollment increased rapidly, from about 3.8 million in 1960 to about 9.2 million in 1972. As entry 3.4 suggests, growth in college enrollment since 1972 has been much less rapid and the projected overall enrollment increases are, by and large, small. Enrollment in public institutions is expected to increase slightly in the late 1970's, with most of the increase concentrated in 2-year institutions. In private institutions, only minor changes in enrollment are foreseen for the next several years. Such enrollment patterns are the basis of some concern among educators and policymakers about the prospects for financing higher education, a topic examined in greater detail in chapter 5.

Although overall enrollments in institutions of higher education are not increasing as rapidly as in the past, the characteristics of the students who are enrolling are changing. College enrollment rates of dependent family members 18 to 24 years old have declined among males and increased among females since 1967, and they are now higher for females than males (entry 3.5). Among income groups, the enrollment rates of middle-income students (family income between $5,000 and $14,999 in 1967 dollars) have ceased declining and have started to rise again. Overall, the probability of attending college is still positively related to family income, although not as strongly as in 1967.

Along with sex and family income, race and ethnicity also seem to be related to access to college. Several patterns in the ethnic and racial composition of students in institutions of higher education are worth noting (entry 3.6). Private universities and 2-year colleges have a slightly larger proportion of racial minority students enrolled than do similar public institutions. But public 4-year institutions have a slightly larger share of minority students than do similar private schools. The highest proportion of minority students is enrolled in 2-year institutions and the lowest at universities.

There have been substantial changes over time in the racial/ethnic and sex composition of the population enrolled in college (entry 3.7). Between 1966 and 1976 the proportion of whites in the population 14 to 34 years old enrolled in college decreased from 93.8 percent to 86.9 percent, while the proportion of white males declined from 58.1 percent to 46.8 percent. Conversely, in 1966, 4.6 percent of this college-going population consisted of black students, while in 1976 this proportion had increased to 10.7 percent. The number of black students increased from about 282,000 in 1966 to about 1,062,000 in 1976, an increase of over 275 percent.

An examination of enrollment patterns of whites, blacks, and Hispanics within family income groups also reveals several interesting points (entry 3.8). Among whites, the college enrollment rate of those having a family income of less than $5,000 is higher than among those in the $5,000 to $20,000 range. In the income range under $5,000, the enrollment rate for whites (28 percent) is substantially higher than the rates for blacks and Hispanics (both 15 percent). However, for students from families earning between $5,000 and $20,000, enrollment rates differ little among whites, blacks, and Hispanics, with the exception of Hispanics from families having an income of $5,000 to $9,999.

Characteristics of Institutions of Higher Education
Closely associated with the size of enrollments in institutions of higher education is the number of the component colleges and universities. Rising enrollments have led to the opening of new institutions of higher education and the establishment of branch campuses. The recent plateau in enrollment growth and the fact that projected enrollment figures indicate only moderate enrollment increases in the near future have raised questions about the number of higher education institutions that will be needed. Both public and private institutions at all levels, except for private 2-year colleges, have been increasing in number since 1970 (entry 3.9). In 1976, 13 more public and 7 more private institutions were in existence than in 1975. These numbers represent net changes, the differences between the numbers of institutions opening and closing.

A different perspective on the nature of higher education is gained by looking at enrollment patterns in higher education for institutions of different sizes (entry 3.10). These data provide some insight into the different kinds of experiences students have. The largest institutions, each of which enroll 20,000 or more students, constitute under 10 percent of all colleges and universities, but enroll almost 47 percent of all students. Conversely, the smallest institutions, each enrolling 1,000 or fewer students, constitute over 39 percent of colleges and universities, but enroll only about 5 percent of all students. Furthermore, private institutions tend to be smaller than public institutions.

For most colleges and universities, governing boards set institutional policies. It is of interest, then, to examine the characteristics of members of governing boards for possible insight into such policies. Looking separately at each of their characteristics, typical members tend to be male, white, college graduates (bachelor's degree), between 50 and 69 years of age, and in a business occupation (entry 3.11). There are also differences between public and private institutions. Public institutions tend to have a slightly smaller proportion of men, more black members, and more members under the age of 50.

Outcomes of Higher Education

In the past few years there has been much discussion of the occupational prospects of recent college graduates. Some analysts have suggested that, from the point of view of the economic returns of schooling, Americans are becoming overeducated. Chapter 1 indicated that, in the past few years, more college graduates have been working in other than white-collar jobs, a development consonant with the thesis that economic returns of college degrees have recently declined. But it is still the case that only a minority of young people complete 4 years of college, and fewer still earn a bachelor's degree by 4 years after high school.

Data recently collected on the level of educational attainment in 1976 of the participants in the National Longitudinal Study (NLS) of the High School Class of 1972 show that only 17.9 percent had earned a bachelor's degree (entry 3.12). An additional 39.5 percent had some college, while 42.5 percent had no higher education at all. In addition, the educational attainments of the NLS participants varied considerably depending upon their background characteristics. White respondents were most likely to finish college, Hispanic least likely, with black and other ethnic and racial group members in between. Family socioeconomic status and ability also were related to who received a 4-year degree "on schedule." The educational expectations these people had in high school turned out to be one of the best predictors of on-schedule college graduation.

Entry 3.13 provides data on college attendance patterns of students. In 1974, barely a majority of students in universities and 4-year colleges and fewer than a third of those attending 2-year institutions had no interruption in their schooling. It was not uncommon for students to drop out for some reason for a period of time, many for over 6 years, and then return.

While many students return to complete their education after dropping out of school, many do not because of obligations, financial pressures, and other reasons. Many studies have shown that students who drop out before completing their education are unlikely to receive as much benefit from their education as do those who complete a degree program. This and other reasons have led to analyzing the factors that affect a student's probability of dropping out. Data on patterns of dropouts among members of the NLS indicate that a number of factors are associated with the rates of student withdrawal from college (entry 3.14). These include ability, educational aspirations, family socioeconomic status, and racial/ethnic background. Data also suggest that financial aid reduces college withdrawal, although its overall impact may be slight.

Financial aid appears to have a more substantial impact on the "on schedule" graduation rates of students—from both 2-year (table 3.14) and 4-year institutions (entry 3.15). While the levels of educational attainment in 1976 reported by members of the high school class of 1972 vary by ability, educational aspiration level, race or ethnicity, and socioeconomic status, students who received aid were more likely to have achieved at least a bachelor's degree.

The total number of bachelor's degrees awarded in the academic year ending in 1976 was down slightly from the peak reached in 1974 (entry 3.16). The number of doctor's degrees awarded in 1976 was also down from the record high of 1973. The numbers of master's and first-professional degrees awarded, on the other hand, reached new highs in 1976. In 1981 the numbers of degrees awarded at all levels are projected to be higher than in any previous year. Of greater interest, however, is the difference between males and females in degrees earned. At all levels the numbers of degrees earned by females are increasing. In the case of bachelor's and master's degrees their numbers are approaching those earned by males. The rate of increase in the numbers of doctor's and first-professional degrees earned by females is especially notable.

An examination of the degrees earned in 1975-76 by members of various racial and ethnic groups is also of interest. Whites (non-Hispanic) earned the vast majority of degrees at all levels (entry 3.17). Their greatest lead was in law, followed closely by medicine; their lowest proportion was among doctoral degrees, largely because many doctoral degrees were received by nonresident aliens. Among non-Hispanic blacks, their largest representation was at the associate level, amounting to 8.4 percent. At the postgraduate level, non-Hispanic blacks earned 6.6 percent of all master's degrees, 5.2 percent of all medical degrees, 4.7 percent of all law degrees, and 3.6 percent of all doctoral degrees. A similar pattern is found among Hispanic degree earners, although the proportion of degrees earned is somewhat lower and Hispanics earned relatively more law than medical degrees.

Since trained professional personnel are essential to the functioning of our society, the number of professional degrees earned over time is worth examining. Between 1969-70 and 1975-76, the number of law degrees earned increased 116 percent (entry 3.18). In contrast the number of medical degrees earned increased about 61 percent; dental degrees, about 46 percent; degrees in veterinary medicine, about 27 percent; and degrees in theology, about 8 percent. The number of advanced (master's and doctor's) engineering degrees earned actually declined slightly over that time span.

For many people, one of the most important reasons for getting an education is to get a good job, one that pays well and utilizes one's skills. Among recent (1974-75) recipients of a bachelor's degree, the average annual salary was about $9,400 in spring, 1976 (entry 3.19). Substantial variation existed, however, among those getting degrees in different fields. The highest salaries were reported by engineers, who earned about $4,000 more than the average. Recent graduates in biology and the humanities reported the lowest salaries, averaging only $7,900 and $8,000 per year respectively. Among those receiving an education degree, the average annual salary reported was $8,100 (although many did not work for 12 months).

Further, about 24 percent of recent college graduates also reported that they were underemployed—they did not have professional, technical, managerial, or administrative jobs and the jobs they did have did not in their opinion require a college degree. Again, this varied by field. Only about 4 percent of engineers reported being underemployed, compared to 41 percent of humanities graduates. About 16 percent of those who got an education degree said they were underemployed.

Adult Education and Noncollegiate Postsecondary Education

Adult education and noncollegiate postsecondary education are areas of growing importance. Many people seek additional schooling, particularly of an occupational, vocational, or technical nature, that can be useful in getting a good or better job or advancing in their current position. Other people without specific occupational or vocational interests want to learn more about a hobby, the arts, sports or recent developments in society, religion, or politics. Institutions offering all of these types of courses have been enrolling increasing numbers of students.

In 1975 over 17 million adults age 17 and over who were not full-time students in high school or college took one or more adult education courses (entry 3.20). Of those enrolled in adult education courses, almost half took courses classified as occupational training. Between 1969 and 1975, the number of people taking occupationally oriented courses increased about 43 percent, which is greater than the overall increase during this period of about 31 percent in the number of adult education participants. Social life and recreation courses, however, showed the greatest increase, about 75 percent. Also worthy of note is the decline in the proportion of participants who took general education courses, from about 27 to 21 percent.

Adult education participation varies among groups classified by education, income and race. For example, over 52 percent of all participants in adult education had some college (1 year or more); in the total adult population, fewer than 27 percent have that much (entry 3.21). Differences in participation rates show this from another perspective. Those with an elementary school education or less have a participation rate of about 2 percent; high school graduates have about a 12 percent participation rate; but those who have done college postgraduate work have a participation rate of over 30 percent. Differences in participation rates among income groups show a similar pattern. Those earning less than $3,000 in 1975 participated at a rate of slightly over 4 percent, while those earning over $25,000 had a participation rate of over 19 percent. Among racial groups, whites participated at a rate of 12.1 percent compared to 6.9 percent for blacks. Overall, the total participation rate has increased from 10.0 percent in 1969 to 11.6 percent in 1975.

While adult education courses for the well-educated are likely to be quite specialized, more basic types of education are also offered. In fact there is increasing interest in adult basic and secondary education (entry 3.22). In 1976, 1.7 million people were enrolled in such courses, an increase of over 100 percent since 1972. The age groups primarily involved in such courses are 16-24 and 35-54, suggesting that people in key employment years are finding these courses desirable. Students come from a variety of racial/ethnic groups. Whites constitute most of the "other" category that makes up about 45 percent of the total 1976 enrollment. Blacks have a participation rate of about 24 percent, while Hispanics have a rate of about 22 percent. Females are more likely than males to take such courses.

A wide variety of institutions, organizations, and groups sponsor adult education courses. The largest number of participants in 1975 took these courses at universities and 4-year colleges, followed closely by those enrolled in 2-year colleges or technical-vocational schools (entry 3.23). Since 1969, however, the number of participants taking courses sponsored by 2-year colleges and technical-vocational schools has increased almost 95 percent compared with a 15 percent increase in those taking courses sponsored by 4-year institutions. Also worth noting is the large number of participants (over 2.6 million) enrolled in courses sponsored by their employers. Labor organizations and professional associations also serve a substantial number of people.

A different perspective is offered by examining the role of institutions of higher education sponsoring adult education courses (entry 3.24). The number of institutions of higher education sponsoring noncredit activities in adult and continuing education more than doubled from 1,102 in 1968 to 2,225 in 1976. The number of such public institutions increased 110 percent, while the number of private institutions increased over 90 percent. Among both public and private institutions, the largest increases were found among 2-year colleges, although there were substantial increases in 4-year institutions as well.

Registrations in adult and continuing education noncredit activities also exhibited substantial changes between 1967-68 and 1975-76. Overall registrations increased about 57 percent during the 8 years, with most of the increase among public institutions (over 60 percent) as opposed to private (about 25 percent). Among public 2-year colleges the number of such registrations increased over 460 percent, while among public 4-year colleges other than universities, the increase exceeded 335 percent. Declines were reported by private 2-year colleges and public universities, although part of the latter can be explained in terms of a change in the ways cooperative extension registrations were recorded. The data presented here suggest that many institutions are broadening their services, perhaps in an attempt to be less financially dependent on "traditional" 18- to 24-year-old full-time students.

Enrollment has also been increasing in federally aided postsecondary and adult vocational education classes (entry 3.25). Office of Education program data show that almost 2.2 million students were enrolled in postsecondary vocational education classes in fiscal year 1976, an increase of over 250 percent from 1968. Most of these students attended school full-time and have had no break in their schooling. In contrast, almost 4.0 million participants were enrolled in adult vocational education classes in 1976, an increase of about 33 percent from 1968. Most of these participants attended school part-time.

The postsecondary vocational education programs having the largest enrollment in 1976 were the office (620,000 students), trades and industry (566,000), and technical (310,000) programs. In contrast, adult education programs enrolling the most students were the trades and industry (1,191,000 students), home economics (764,000), and office (670,000) programs. It is also worth noting that the number of people taking courses classified in the "other" category of vocational education has increased on a percentage basis faster than the identified types. This suggests that new programs and areas are being incorporated into the vocational education curriculum.

Another view of postsecondary education is offered by noncollegiate schools with occupational programs (entry 3.26). These institutions offer a sequence of courses leading to a specific occupational objective—they prepare individuals for gainful employment and provide assistance in updating the skills of persons already in an occupation. Included are proprietary (for-profit) schools, nonprofit schools, hospitals operated by religious groups, public schools and technical institutes.

In 1975-76 there were 8,605 noncollegiate postsecondary schools with occupational programs. These schools tend to be relatively small institutions specializing in specific fields. The greatest number of these schools offered cosmetology/barbering, flight, and vocational/technical programs. About 88.5 percent of noncollegiate postsecondary schools are private. Since 1973-74 the number of private schools decreased about 4 percent, while the number of public schools increased by 11 percent. During this time the total number of schools decreased about 3 percent.

Table 3.1
Educational plans of high school seniors, 14 to 34 years old, by racial/ethnic group, family income, and years of school completed by family head: 1975

Characteristic	Total number reporting (thousands)	Percent of those reporting who:			
				Do not plan to attend college	
		Plan to attend college	May attend college	Total	Plan to attend vocational school
Racial/ethnic group:					
White	2,780	49.4	23.8	26.7	5.8
Black	462	40.5	34.6	24.7	5.6
Hispanic	180	47.8	36.7	15.6	.0
Family income:					
$25,000 and over	382	81.2	11.3	7.9	3.1
$15,000–24,999	895	56.3	23.9	19.8	3.6
$10,000–14,999	768	43.1	27.7	29.2	4.8
$7,500–9,999	293	46.4	24.6	29.0	6.5
$5,000–7,499	260	31.5	28.5	40.0	9.2
Under $5,000	276	37.0	29.7	33.3	11.6
Years of school completed by family head:					
College:					
4 years or more	612	77.5	15.2	7.2	2.1
1–3 years	382	61.8	21.7	16.8	3.7
High school:					
4 years	1,100	45.3	27.5	27.3	6.5
1–3 years	582	36.9	29.7	33.3	6.5
Elementary:					
Less than 8 years	471	31.6	28.9	39.7	8.7

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P–20, No. 299, November 1976.

Chart 3.1
Educational Plans of High School Seniors

Educational plans of high school seniors are closely related to family income level and the education of the head of the family.

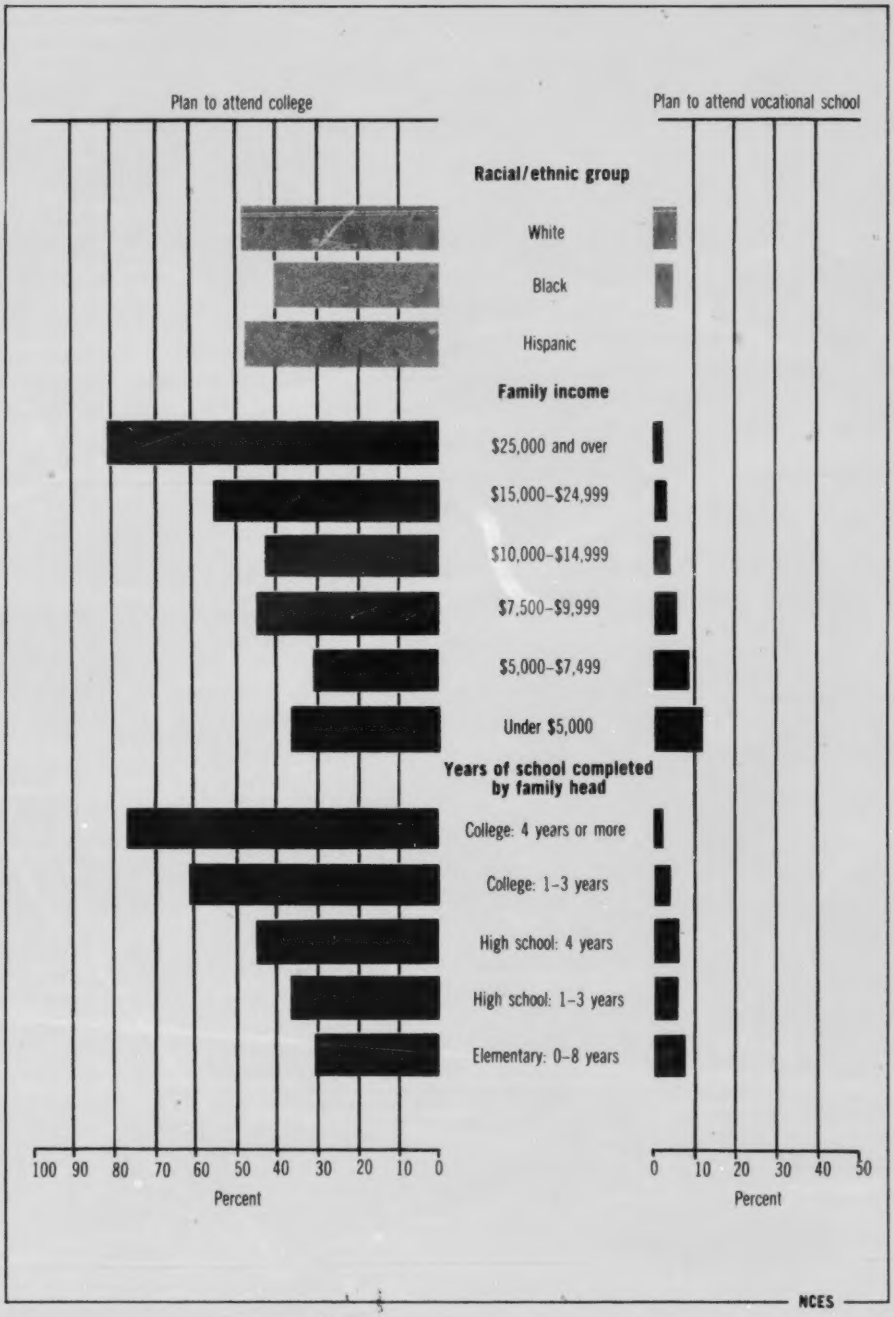

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Table 3.2

Number and percent of 18- to 24-year olds[1] interested in attending school by racial/ethnic origin and by family income: 1976

		Family income					
Racial/ethnic origin[2]	Total	Under $5,000	$5,000–$9,999	$10,000–$14,999	$15,000–$19,999	$20,000–$24,999	$25,000 and over
				(Numbers in thousands)			
White							
Total	10,132	1,164	2,412	2,358	1,644	1,036	1,518
Number interested in attending school	4,344	590	1,111	995	652	390	608
Percent interested in attending school	43	**51**	**46**	**42**	**40**	**37**	**40**
Black							
Total	1,288	238	409	282	169	107	86
Number interested in attending school	718	144	226	156	91	54	47
Percent interested in attending school	56	**61**	**55**	**55**	**54**	**50**	**55**
Hispanic							
Total	490	76	145	132	79	27	31
Number interested in attending school	257	46	74	70	41	(3)	(3)
Percent interested in attending school	52	**60**	**51**	**53**	**52**	...	...

[1] Who were not in school, had completed high school, and were reported to be "interested in attending school" by the household respondent.

[2] Categories are not discrete (e.g., a person may be classified in both white and Hispanic categories).

[3] Estimates under 15,000 are not reported.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, unpublished data.

Chart 3.2
High School Graduates Not in School, 18 to 24 Years Old, Interested in Attending School

Among high school graduates 18 to 24 years old not in school, proportionately more blacks and Hispanics than whites are interested in attending school.

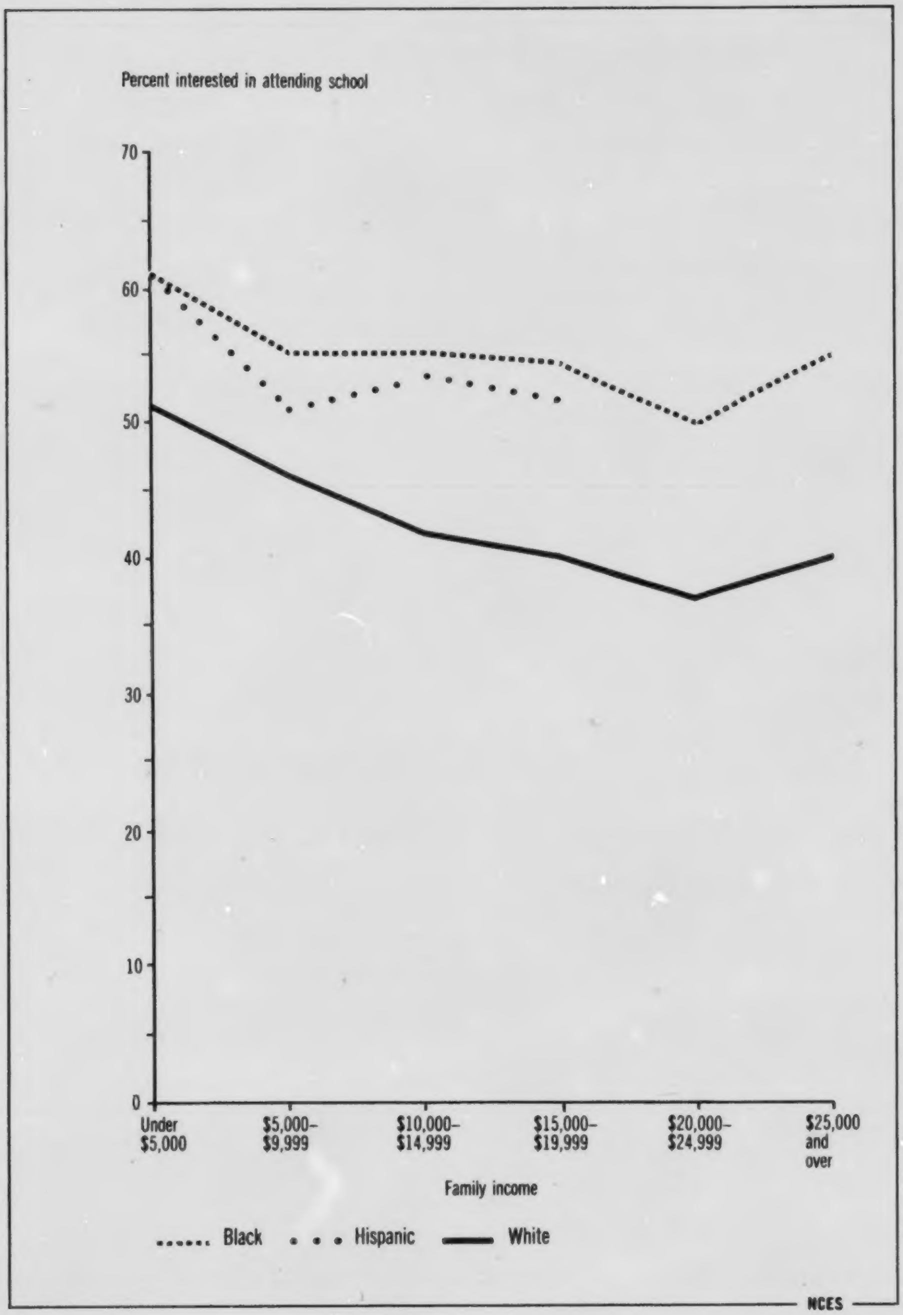

Table 3.3
Reasons cited as very important by first-time entering freshmen for deciding to go to college: Fall 1971, fall 1976, and fall 1977

Reasons for deciding to go to college	Percent of first-time freshman respondents citing reason as very important		
	1971	1976	1977
Learn more about things of interest	60.8	72.9	79.3
Able to get a better job	73.8	71.0	77.0
Gain a general education and appreciation of ideas	59.5	64.0	70.9
Able to make more money	49.9	53.8	62.1
Meet new and interesting people	45.1	53.3	59.4
Prepare for graduate or professional schools	34.5	43.9	45.9
Improve reading and study skills	22.2	35.1	42.6
Become more cultured person	28.9	32.8	38.9
Parents wanted student to go	22.9	29.3	28.8
Wanted to get away from home	NA	9.1	9.1
Could not find a job	NA	5.7	6.1
Nothing better to do	2.2	2.6	2.4

NA: Not available.

NOTE: More than one reason could be cited as very important.

SOURCE: American Council on Education, Cooperative Institutional Research Program, *The American Freshman: National Norms,* 1971, 1976, and advance data, 1977.

Chart 3.3
Reasons Cited by Freshmen in Deciding To Go To College

Over 79 percent of college freshmen in 1977 cited "learning more about things of interest" as a very important reason for deciding to go to college. About 77 percent cited "getting a better job" as among their reasons.

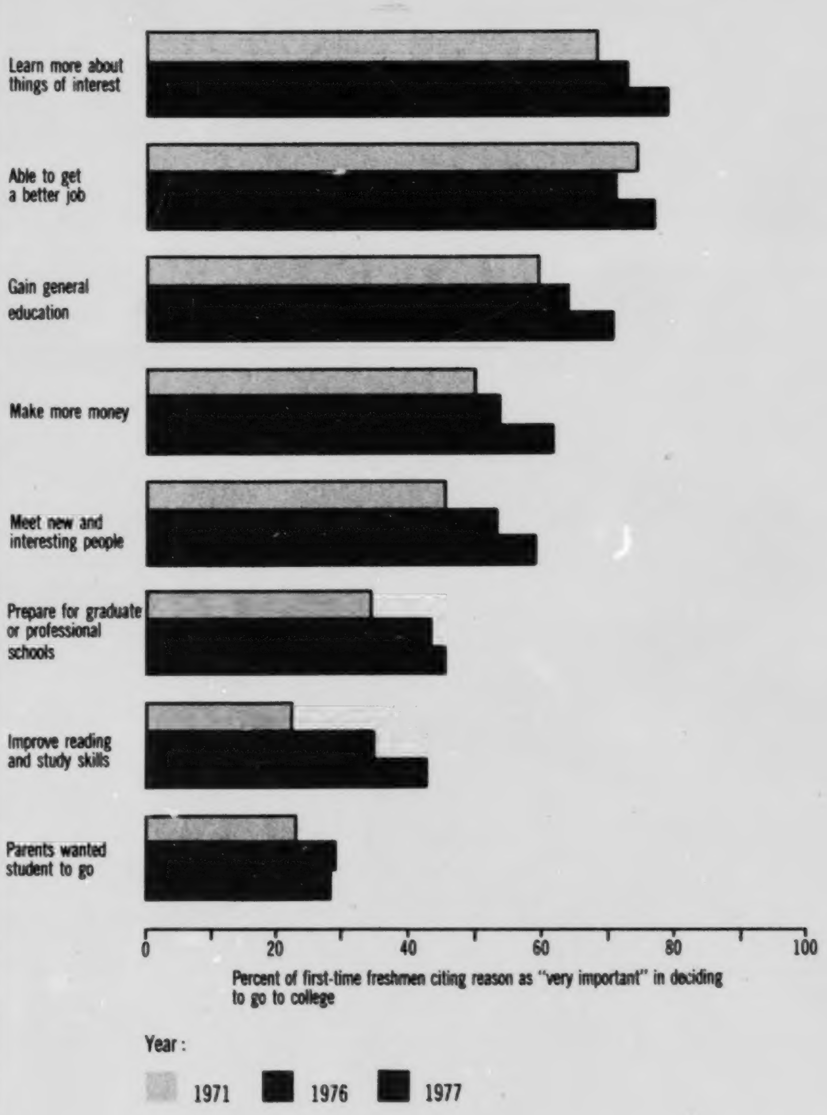

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Table 3.4
Total enrollment in institutions of higher education, by type and control of institution, with low and high alternative projections: Fall 1972 to fall 1982

Type and control of institution	Fall of year					
	1972	1973	1974	1975	1976	
			(In thousands)			
All institutions	**9,215**	**9,602**	**10,224**	**11,185**	**11,012**	
4-year institutions	6,459	6,592	6,820	7,215	7,129	
Universities	2,621	2,630	2,702	2,838	2,780	
Other 4-year institutions	3,838	3,962	4,117	4,376	4,349	
2-year institutions	2,756	3,010	3,404	3,970	3,883	
Public institutions	7,071	7,420	7,988	8,835	8,653	
4-year institutions	**4,430**	**4,530**	**4,703**	**4,998**	**4,902**	
Universities	1,941	1,951	2,007	2,124	2,080	
Other 4-year institutions	2,489	2,579	2,696	2,874	2,822	
2-year institutions	**2,641**	**2,890**	**3,285**	**3,836**	**3,752**	
Private institutions	2,144	2,183	2,235	2,350	2,359	
4-year institutions	**2,029**	**2,062**	**2,117**	**2,217**	**2,227**	
Universities	680	679	696	714	700	
Other 4-year institutions	1,349	1,383	1,421	1,503	1,527	
2-year institutions	**115**	**120**	**119**	**134**	**132**	
			Projected low alternative			
	1977	1978	1979	1980	1981	1982
All institutions	**11,287**	**11,408**	**11,524**	**11,631**	**11,646**	**11,602**
4-year institutions	7,159	7,123	7,088	7,059	6,982	6,876
2-year institutions	4,128	4,285	4,436	4,572	4,664	4,726
Public institutions	8,922	9,059	9,189	9,309	9,352	9,348
4-year institutions	**4,933**	**4,912**	**4,893**	**4,878**	**4,830**	**4,763**
2-year institutions	**3,989**	**4,147**	**4,296**	**4,431**	**4,522**	**4,585**
Private institutions	2,365	2,349	2,335	2,322	2,294	2,254
4-year institutions	**2,226**	**2,211**	**2,195**	**2,181**	**2,152**	**2,113**
2-year institutions	**139**	**138**	**140**	**141**	**142**	**141**
			Projected high alternative			
	1977	1978	1979	1980	1981	1982
All institutions	**11,696**	**12,156**	**12,635**	**13,122**	**13,511**	**13,841**
4-year institutions	7,888	7,508	7,622	7,728	7,764	7,752
2-year institutions	4,308	4,648	5,013	5,394	5,747	6,089
Public institutions	9,255	2,679	10,122	10,575	10,955	11,291
4-year institutions	**5,090**	**5,179**	**5,264**	**5,343**	**5,375**	**5,374**
2-year institutions	**4,165**	**4,500**	**4,858**	**5,232**	**5,580**	**5,917**
Private institutions	2,441	2,477	2,513	2,547	2,556	2,550
4-year institutions	**2,298**	**2,329**	**2,358**	**2,358**	**2,389**	**2,378**
2-year institutions	**143**	**148**	**155**	**162**	**167**	**171**

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics*, 1977–78, and *Projections of Education Statistics to 1986–87*.

Chart 3.4
Enrollment in Institutions of Higher Education

Projected enrollment growth in higher education is greatest for public 2-year institutions.

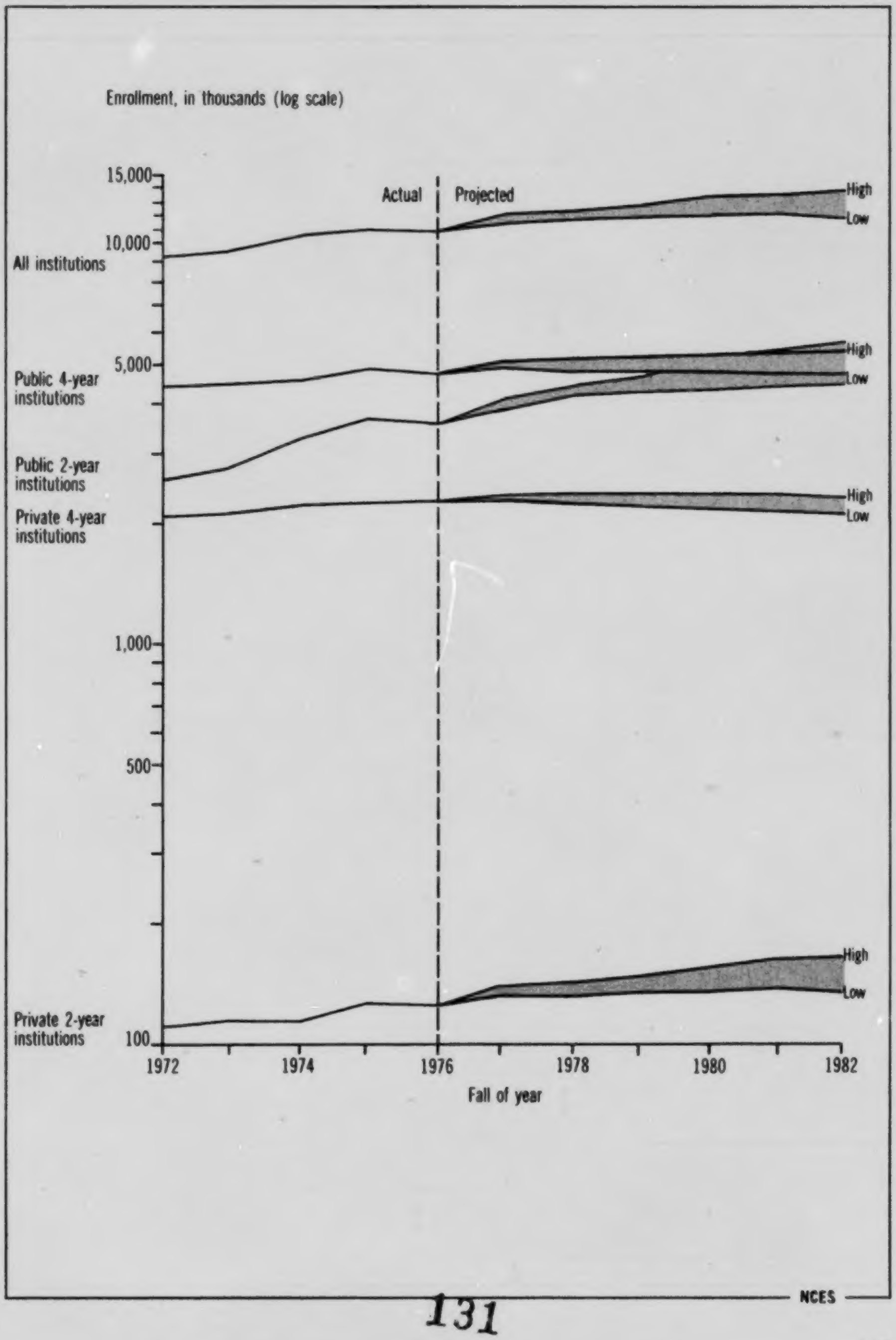

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Table 3.5
College enrollment rates of dependent family members,[1] 18 to 24 years old, by family income (in 1967 dollars) and sex: October 1967 to October 1976

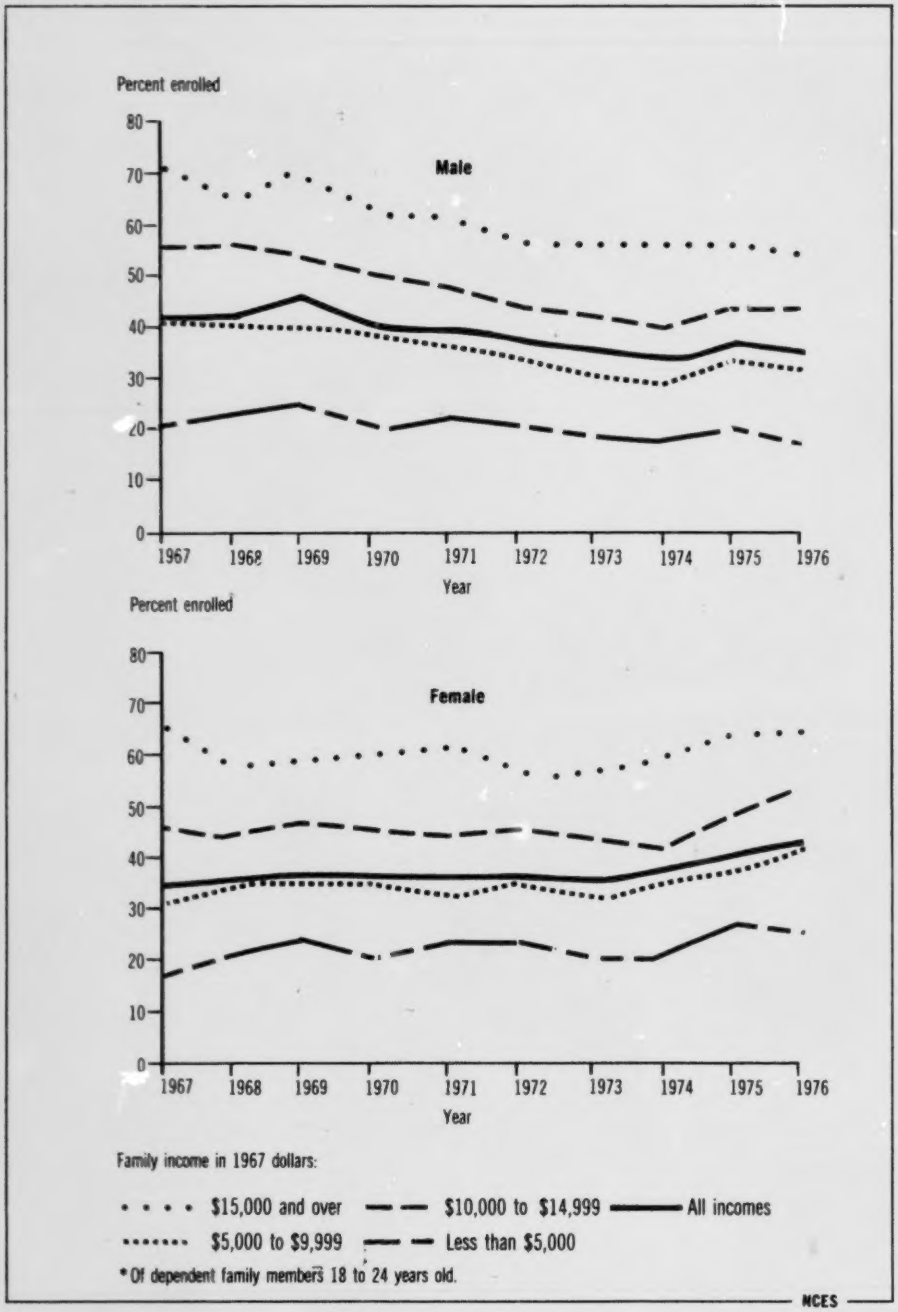
Sex and family income	Percent enrolled									
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
TOTAL										
All incomes	39.1	39.7	41.3	39.1	38.9	37.8	36.6	36.2	38.7	38.8
Less than $5,000	20.0	22.5	24.8	20.8	22.8	22.6	20.1	20.3	23.5	22.4
$5,000 to $9,999	37.9	38.5	38.8	36.6	35.4	34.2	31.2	31.7	35.1	36.3
$10,000 to $14,999	51.9	50.7	50.6	48.4	46.4	44.2	42.7	41.4	45.4	47.5
$15,000 and over	68.3	63.0	65.2	61.7	61.8	56.9	56.6	57.5	59.6	58.2
Not reported	36.4	37.4	38.6	37.1	36.6	36.5	39.8	38.0	37.9	34.9
Male										
All incomes	42.9	43.5	44.4	40.9	40.0	37.8	36.5	34.9	36.7	35.3
Less than $5,000	22.1	23.1	25.9	20.7	22.0	21.5	19.9	19.5	20.2	18.9
$5,000 to $9,999	43.0	42.0	41.3	38.4	37.0	34.3	30.6	29.5	33.2	32.1
$10,000 to $14,999	56.8	56.6	54.7	50.7	48.3	43.7	41.4	40.5	43.0	43.0
$15,000 and over	71.0	66.7	70.5	63.7	61.9	57.3	56.8	56.0	56.5	54.5
Not reported	39.2	42.3	41.3	39.1	38.2	37.9	41.0	37.3	40.2	33.6
Female										
All incomes	34.9	35.5	37.8	37.0	37.5	38.0	36.8	37.9	41.2	43.2
Less than $5,000	17.5	21.9	23.5	20.8	23.7	23.9	20.3	21.4	27.4	26.4
$5,000 to $9,999	32.0	34.5	35.9	34.5	33.5	34.2	31.9	34.7	37.6	41.6
$10,000 to $14,999	46.3	44.6	46.0	45.5	44.0	45.0	44.3	42.7	48.5	53.1
$15,000 and over	65.2	58.3	58.6	59.3	61.6	56.4	56.4	59.5	63.6	63.1
Not reported	33.5	32.1	35.6	34.6	34.3	34.7	38.3	39.0	35.0	36.6

[1] Relatives of the primary family heads other than spouses.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *School Enrollment—Social and Economic Characteristics of Students*, Series P-20, No. 319.

Chart 3.5
College Enrollment Rates* by Sex and Family Income

College enrollment rates have declined among males and increased among females since 1967, and they are now higher for females than males.



*Of dependent family members 18 to 24 years old.

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Table 3.6
Full-time enrollment in institutions of higher education, by racial/ethnic group and level and control of institution: Aggregate United States, fall 1976

Level of institution	Total	White [1]	Black [1]	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native	Non-resident alien
UNIVERSITY:							
Number	2,079,939	1,794,252	107,399	56,115	42,401	9,494	70,278
Percent	100.0	86.3	5.2	2.7	2.0	0.5	3.4
Private:							
Number	480,729	401,856	31,403	10,717	10,511	1,657	24,585
Percent	**100.0**	**83.6**	**6.5**	**2.2**	**2.2**	**0.3**	**5.1**
Public:							
Number	1,589,210	1,382,396	75,996	45,398	31.890	7,837	45,693
Percent	**100.0**	**87.0**	**4.8**	**2.9**	**2.0**	**0.5**	**2.9**
OTHER 4-YEAR:							
Number	3,015,236	2,447,698	330,324	113,188	43,202	15,302	65,522
Percent	100.0	81.2	11.0	3.8	1.4	0.5	2.2
Private:							
Number	1,139,262	944,427	107,116	41,584	11,444	3,446	31,245
Percent	**100.0**	**82.9**	**9.4**	**3.7**	**1.0**	**0.3**	**2.7**
Public:							
Number	1,875,974	1,503,271	223,208	71,604	31,758	11,856	34,277
Percent	**100.0**	**80.1**	**11.9**	**3.8**	**1.7**	**0.6**	**1.8**
2-YEAR							
Number	1,690,775	1,272,034	221,874	119,444	33,908	18,424	25,091
Percent	100.0	75.2	13.1	7.1	2.0	1.1	1.5
Private:							
Number	118,507	78,920	16,479	18,100	700	1,496	2,812
Percent	**100.0**	**66.6**	**13.9**	**15.3**	**0.6**	**1.3**	**2.4**
Public:							
Number	1,572,268	1,193,114	205,395	101,344	33,208	16,928	22,279
Percent	**100.0**	**75.9**	**13.1**	**6.4**	**2.1**	**1.1**	**1.4**

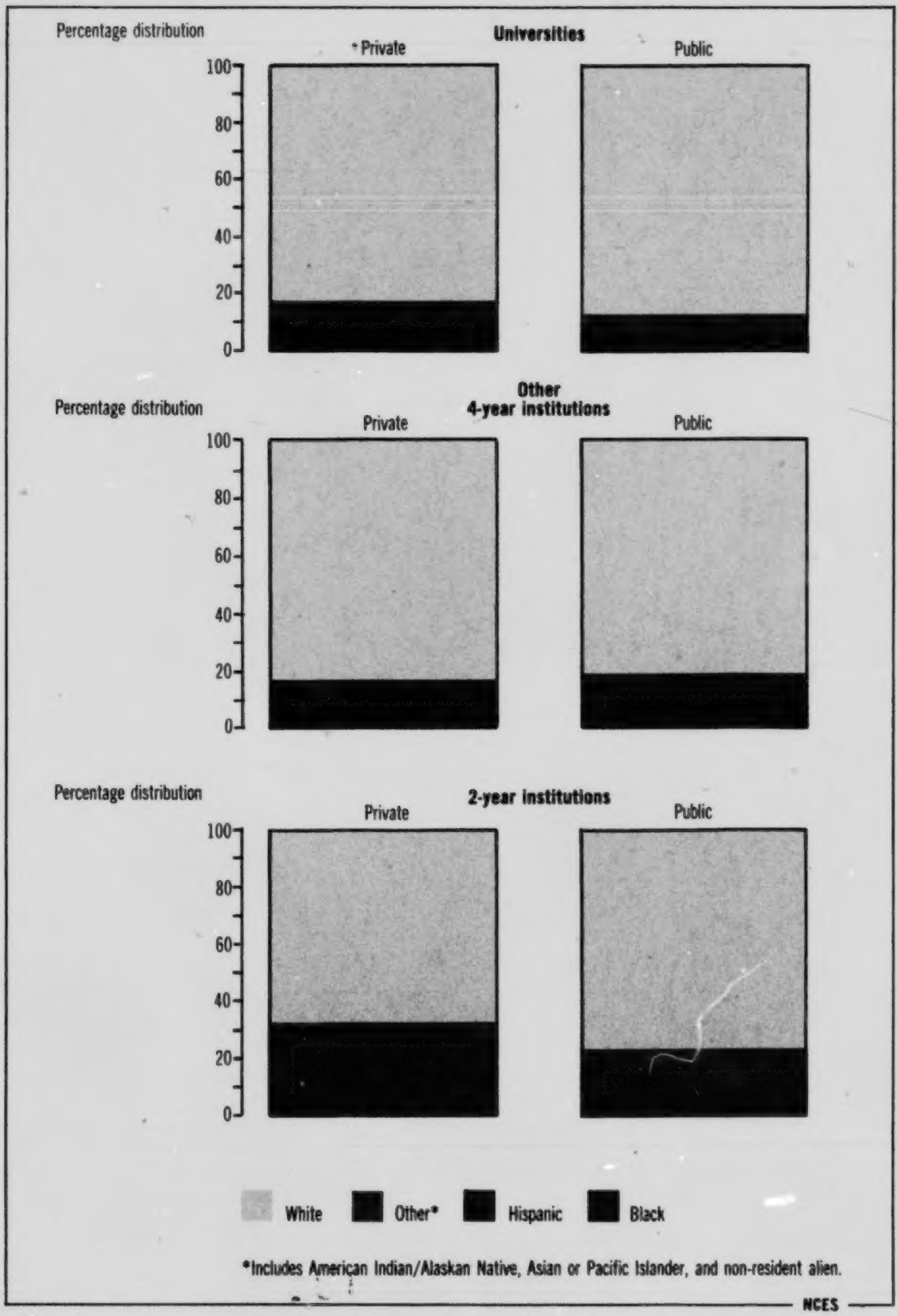
[1] Non-Hispanic.

NOTE: These data do not include those institutions that did not provide information by ethnic and racial categories.

SOURCE: U.S. Department of Health, Education, and Welfare, Office for Civil Rights and National Center for Education Statistics, preliminary data.

Chart 3.6
Enrollment in Institutions of Higher Education, by Racial/Ethnic Group

Non-white enrollment is greater at private than at public universities and 2-year institutions, but it is greater at public than at private 4-year institutions.



*Includes American Indian/Alaskan Native, Asian or Pacific Islander, and non-resident alien.

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Table 3.7
College enrollment of the population[1] 14 to 34 years old, by race and sex: October 1966 to October 1976

Item	Total	White		Black		Other
		Male	Female	Male	Female	
	(Numbers in thousands)					
1966:						
Number	6,085	3,536	2,172	154	128	95
Percent	**100.0**	**58.1**	**35.7**	**2.5**	**2.1**	**1.6**
1967:						
Number	6,401	3,560	2,345	199	171	126
Percent	**100.0**	**55.6**	**36.6**	**3.1**	**2.7**	**2.0**
1968:						
Number	6,801	3,843	2.412	221	213	112
Percent	**100.0**	**56.5**	**35.5**	**3.3**	**3.1**	**1.6**
1969:						
Number	7,435	4,146	2,681	236	256	116
Percent	**100.0**	**55.8**	**36.1**	**3.2**	**3.4**	**1.6**
1970:						
Number	7,413	4,066	2,693	253	269	132
Percent	**100.0**	**54.9**	**36.3**	**3.4**	**3.6**	**1.8**
1971:						
Number	8,087	4,407	2,867	363	317	134
Percent	**100.0**	**54.5**	**35.5**	**4.5**	**3.9**	**1.7**
1972:						
Number	8,313	4,397	3,061	384	343	128
Percent	**100.0**	**52.9**	**36.8**	**4.6**	**4.1**	**1.5**
1973:						
Number	8,179	4,218	3,105	358	326	171
Percent	**100.0**	**51.6**	**38.0**	**4.4**	**4.0**	**2.1**
1974:						
Number	8,827	4,367	3,413	422	392	232
Percent	**100.0**	**49.5**	**38.7**	**4.8**	**4.4**	**2.6**
1975:						
Number	9,697	4,774	3,743	442	506	233
Percent	**100.0**	**49.2**	**38.6**	**4.6**	**5.2**	**2.4**
1976:						
Number	9,950	4,658	3,986	489	573	244
Percent	**100.0**	**46.8**	**40.1**	**4.9**	**5.8**	**2.5**

[1] Civilian noninstitutional population.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *School Enrollment—Social and Economic Characteristics of Students: October 1976* (Advance Report); Series P-20, No. 309, July 1977.

Chart 3.7
Distribution of College Enrollment, by Race and Sex

The proportion of college enrollees who are black has increased from 4.6 percent in 1966 to 10.7 percent in 1976. The number of black college students has increased over 275 percent from 1966 to 1976.

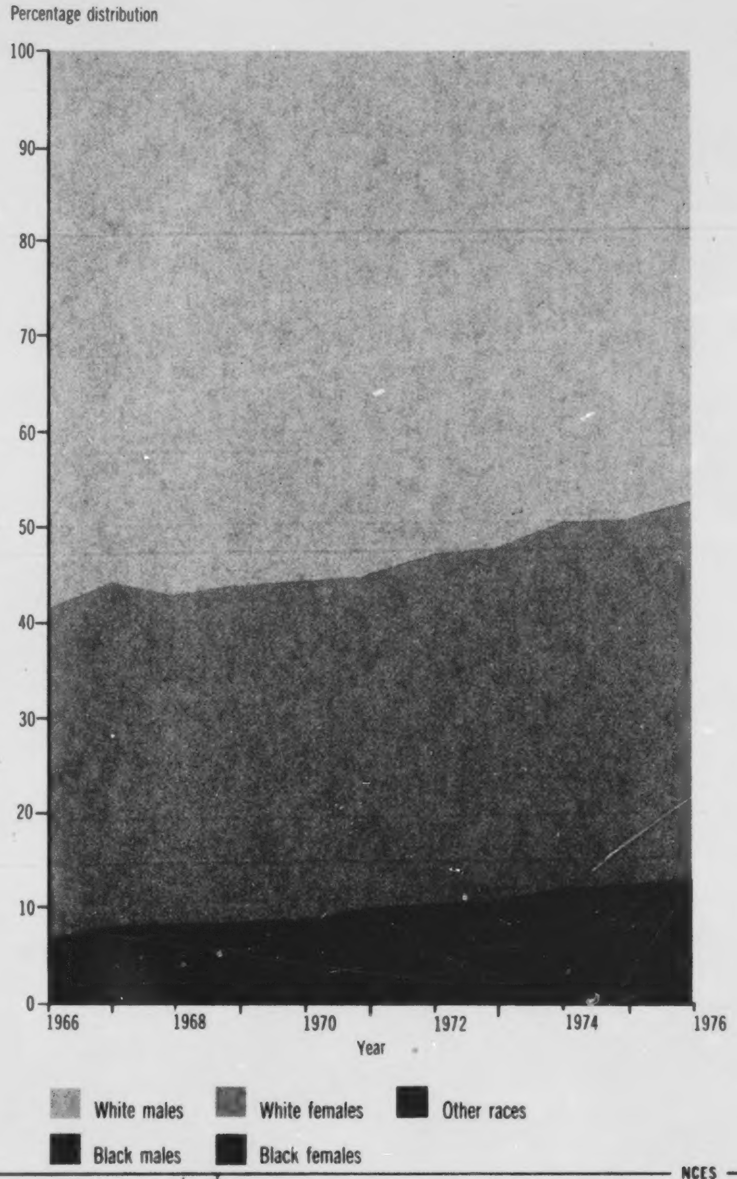

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Table 3.8
Number and college enrollment of persons 18 years old and over, by family income and racial/ethnic group: Spring 1976

	Family income						
Age and racial/ethnic group[1]	All incomes	Under $5,000	$5,000–9,999	$10,000–14,999	$15,000–19,999	$20,000–24,999	$25,000 and over
	(Numbers in thousands)						
18 to 24 years old							
White:							
Total	23,305	3,112	4,823	4,617	3,534	2,540	4,679
Number enrolled	6,200	879	728	776	855	820	2,143
Percent of income group	27	**28**	**15**	**17**	**24**	**32**	**46**
Black:							
Total	3,321	782	998	663	395	241	242
Number enrolled	668	118	169	136	94	58	92
Percent of income group	20	**15**	**17**	**21**	**24**	**24**	**38**
Hispanic:							
Total	1,440	316	404	354	189	86	91
Number enrolled	244	47	46	59	42	15	36
Percent of income group	17	**15**	**11**	**17**	**22**	**17**	**39**
25 years old and over							
White:							
Total	105,913	13,490	20,213	21,943	19,037	13,205	18,206
Number enrolled	4,189	300	573	847	929	651	890
Percent of income group	4	2	3	4	5	5	5
Black:							
Total	11,492	3,023	3,147	2,246	1,383	815	877
Number enrolled	537	71	92	100	84	71	120
Percent of income group	5	2	3	4	6	9	14
Hispanic:							
Total	4,783	931	1,324	1,195	657	355	320
Number enrolled	207	21	36	69	35	32	0
Percent of income group	4	2	3	6	5	9	0

[1] Categories are not discrete (i.e. a person may be counted in both the white and Hispanic categories).

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, unpublished data.

Chart 3.8
College Enrollment Rates by Family Income and Racial/Ethnic Origin

Among 18- to 24-year-olds with a family income between $5,000 and $19,999, the college enrollment rate of blacks exceeds that of whites and Hispanics.

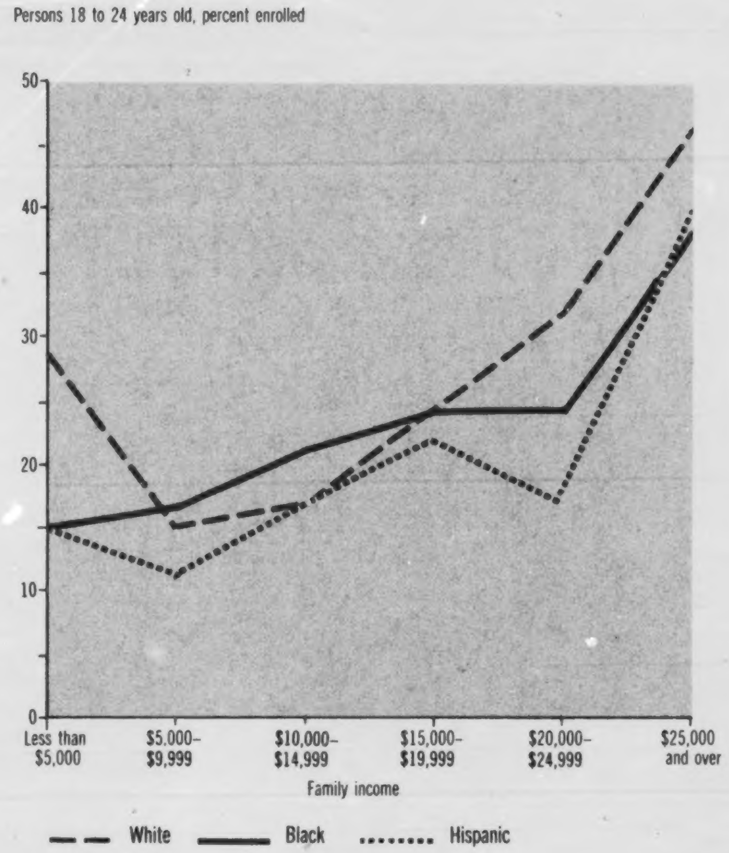

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Table 3.9

Number of institutions of higher education and branches, by control and level of institution: Aggregate United States, academic year ending 1970 to 1977

Control and level of institution	1970	1971	1972	1973	1974	1975	1976	1977
Total	2,836	2,855	2,902	2,951	3,018	3,038	3,055	3,075
4-year	1,773	1,799	1,806	1,834	1,867	1,887	1,914	1,928
2-year	1,063	1,056	1,096	1,117	1,151	1,151	1,141	1,147
Public	**1,312**	**1,335**	**1,381**	**1,414**	**1,445**	**1,453**	**1,454**	**1,467**
4-year	**519**	**530**	**536**	**541**	**549**	**552**	**553**	**558**
2-year	**793**	**805**	**845**	**873**	**896**	**901**	**901**	**909**
Private	**1,524**	**2,520**	**1,521**	**1,537**	**1,573**	**1,585**	**1,601**	**1,608**
4-year	**1,254**	**1,269**	**1,270**	**1,293**	**1,318**	**1,335**	**1,361**	**1,370**
2-year	**270**	**251**	**251**	**244**	**255**	**250**	**240**	**238**
				Percentage distribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4-year	62.5	63.0	62.2	62.1	61.8	62.1	62.7	62.7
2-year	37.5	37.0	37.8	37.9	38.1	37.9	37.3	37.3
Public	46.3	46.8	47.6	47.9	47.9	47.8	47.6	47.7
4-year	18.3	18.6	18.5	18.3	18.2	18.2	18.1	18.1
2-year	28.0	28.2	29.1	29.6	29.7	29.7	29.5	29.6
Private	53.7	53.2	52.4	52.1	52.1	52.2	52.4	52.3
4-year	44.2	44.4	43.8	43.8	43.7	43.9	44.5	44.6
2-year	9.5	8.8	8.6	8.3	8.4	8.2	7.9	7.7

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Education Directory, Colleges and Universities, 1976–77.*

Chart 3.9
Number of Institutions of Higher Education

The number of institutions of higher education and their branches increased over the period 1970 to 1977.

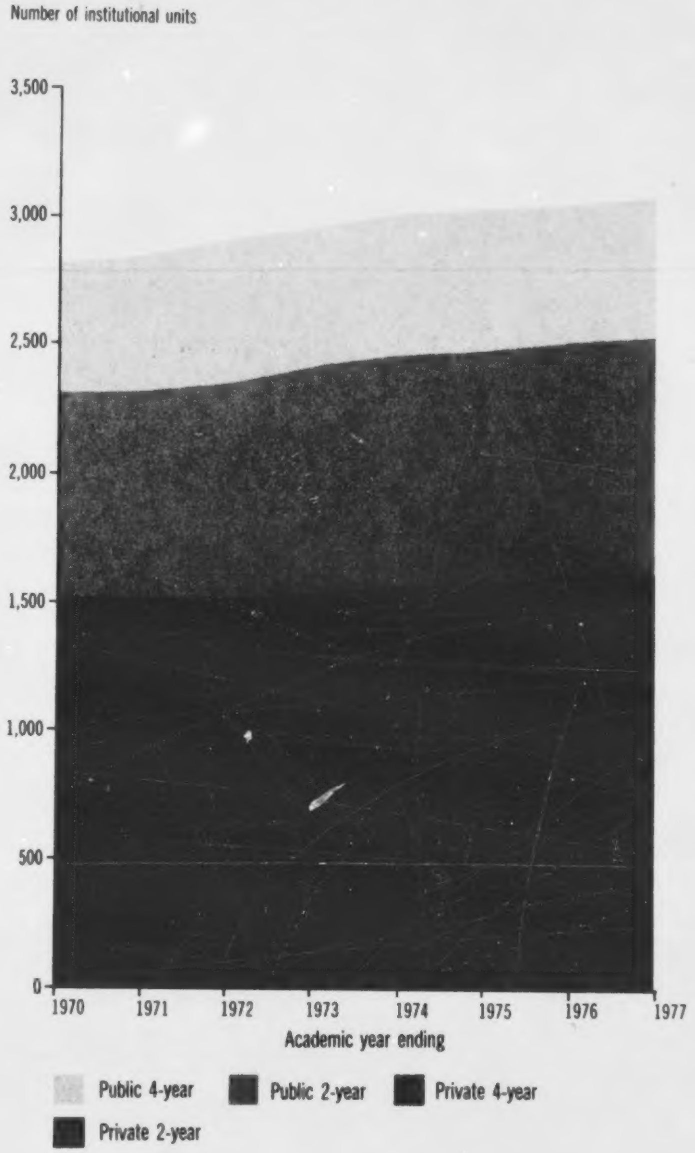

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Table 3.10
Number of and total enrollment in institutions of higher education, by level, control and size of institution: 1976

Control and size [1] of institution	Total		University		Other 4-year		2-year	
	Enroll-ment	Number of institutions	Enroll-ment	Number of institutions	Enroll-ment	Number of institutions	Enroll-ment	Number of institutions
Public:								
1-1,000	**152,131**	224	0	0	19,426	34	132,705	190
1,001-2,499	**673,012**	401	0	0	187,838	106	485,174	295
2,500-4,999	**1,024,594**	288	0	0	388,210	106	636,384	182
5,000-9,999	**2,110,409**	293	110,617	14	901,526	128	1,098,266	151
10,000-19,999	**2,379,851**	172	425,795	28	911,160	70	1,042,896	74
20,000 or more	**2,372,637**	87	1,567,733	54	434,422	18	370,482	15
Private:								
1-1,000	**428,787**	980	0	0	352,278	781	76,509	199
1,001-2,499	**620,761**	408	2,289	1	576,644	377	41,828	30
2,500-4,999	**435,870**	123	42,935	10	377,765	109	15,170	4
5,000-9,999	**464,288**	63	222,822	28	224,267	32	17,199	3
10,000-19,999	**283,608**	21	256,836	19	26,772	2	0	0
20,000 or more	**175,478**	7	175,478	7	0	0	0	0

[1] In numbers of students.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished data.

Chart 3.10
Students Enrolled by Size of Institution of Higher Education

The majority of college students go to institutions enrolling 5,000 students or more.

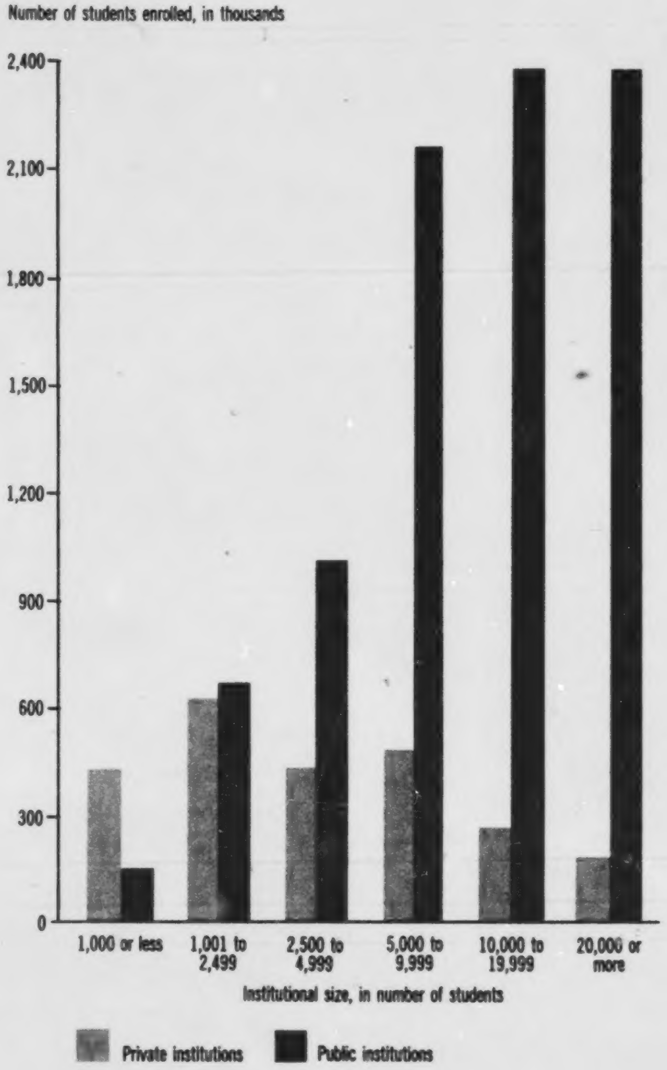

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Table 3.11
Characteristics of voting members of college and university governing boards: 1976

Characteristic	All institutions				Public institutions			Private institutions	
			Multi-campus			Multi-campus			
	Total	Single-campus	3 or less	More than 3	Single-campus	3 or less	More than 3	Single-campus	Multi-campus
Number	47,138	44,759	1,368	1,011	5,458	609	846	39,301	924
					Percent				
Sex:									
Total	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	100.0
Female	15.1	15.1	14.2	14.8	**18.3**	15.1	15.9	**14.7**	12.7
Male	84.9	84.9	85.8	85.2	**81.7**	84.9	84.1	**85.3**	87.3
Race:									
Total	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	100.0
Black	6.0	5.9	4.5	8.7	**10.9**	6.7	9.7	**5.2**	2.9
Other minority	1.0	1.0	1.2	2.4	**2.7**	2.1	2.9	**0.7**	0.3
White	93.0	93.1	94.3	88.9	**86.4**	91.1	87.4	**94.0**	96.8
Age:									
Total	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	100.0
Under 30	2.2	2.1	2.9	4.6	**2.2**	3.0	5.5	2.1	2.3
30 to 49	31.7	31.6	29.9	32.4	**42.5**	32.5	36.1	**30.2**	25.4
50 to 69	59.7	59.7	62.5	57.3	**50.6**	59.5	52.8	**60.8**	67.6
70 and over	6.5	6.6	4.7	5.7	**4.6**	5.0	5.6	**6.8**	4.7
Education:									
Total	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	100.0
Less than bachelor's	9.7	9.6	9.5	13.9	**17.3**	11.9	16.2	**8.6**	6.6
Bachelor's	38.8	38.8	40.3	35.8	**37.7**	38.6	38.0	**38.9**	38.4
Master's	19.4	19.6	14.7	16.8	**17.5**	15.8	15.1	**19.8**	16.0
Ph.D, Ed.D	11.0	11.1	10.1	8.3	**5.9**	5.2	6.7	**11.8**	14.6
M.D., J.D	21.2	21.0	25.3	25.2	**21.6**	28.4	24.0	**20.9**	24.3
Occupation:									
Total	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	100.0
Business	34.5	34.4	35.9	31.2	**34.1**	28.9	27.9	**34.5**	42.5
Educational	10.2	10.2	8.4	11.3	**5.7**	2.5	9.4	**10.9**	14.3
Professional	25.1	25.3	18.3	22.5	**20.7**	22.0	23.9	**25.9**	15.5
Other[1]	26.7	26.5	32.6	29.9	**34.5**	37.9	32.4	**25.4**	25.5
Member of:									
Another governing board	18.8	18.8	20.7	14.6	**7.0**	10.5	11.8	**20.4**	28.9
A corporation board	31.5	31.5	35.6	29.3	**23.1**	28.7	27.3	**32.6**	40.8

[1] Includes farmer, homemaker, executive in nonprofit organization, retired, and other.

NOTE: Details may not add to totals because of rounding.

SOURCE: American Council on Education, Higher Education Panel, *Composition of College and University Governing Boards.*

Chart 3.11
Voting Members of Governing Boards of Single-Campus Colleges and Universities

Most voting members of governing boards of colleges and universities are male, white, and between 50 and 69 years old.

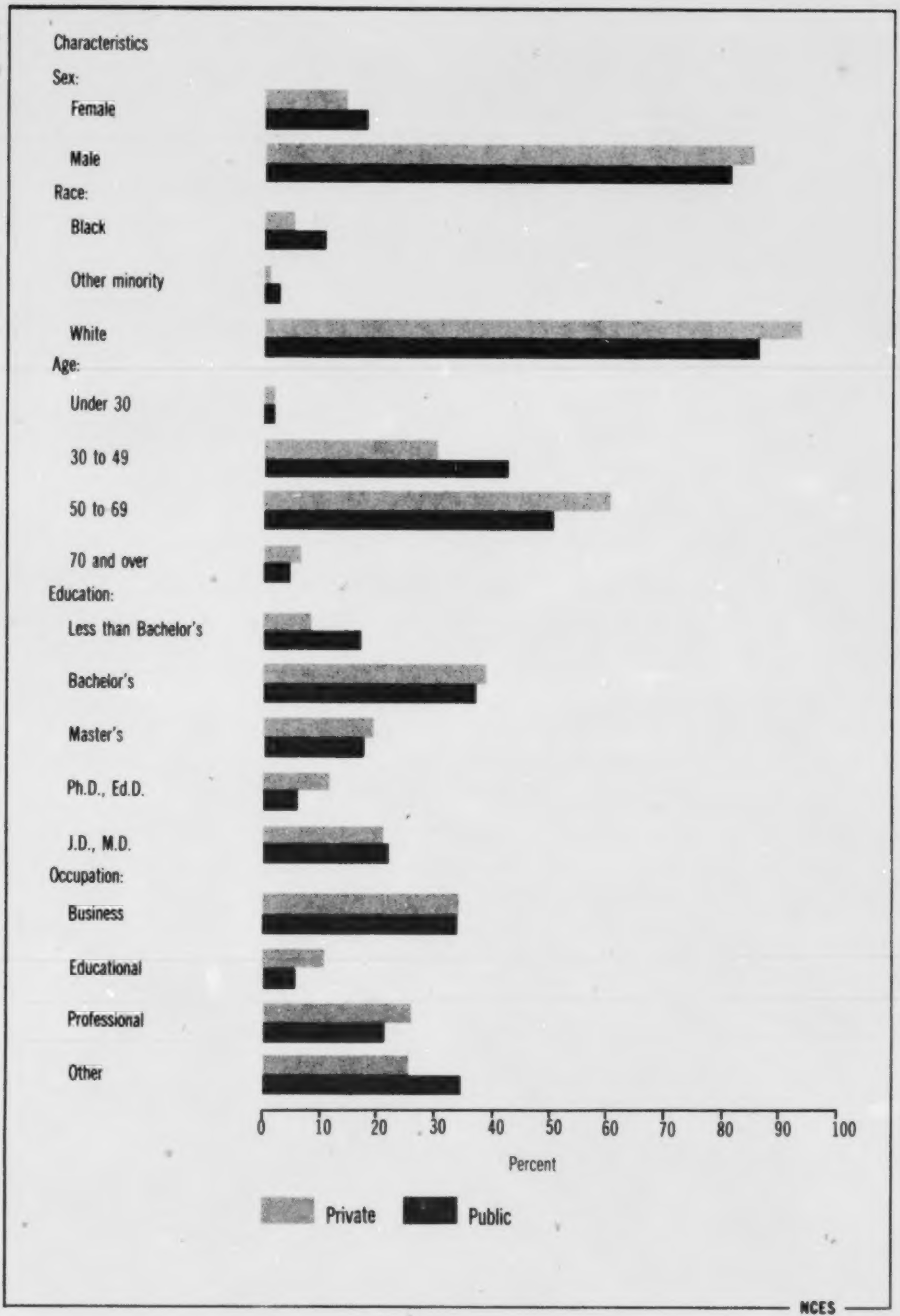

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Table 3.12
Educational attainment of the high school class of 1972, by selected characteristics: 1976

Characteristic	Total	Percent attaining		
		Bachelor's degree or higher	Some college	No higher education
TOTAL	100.0	17.9	39.5	42.5
Ability:				
Low	100.0	3.5	27.5	69.0
Middle	100.0	13.1	44.1	42.8
High	100.0	38.6	46.4	15.0
High school educational expectations:				
High school or less	100.0	0.9	12.7	86.4
Vocational-technical	100.0	2.1	29.9	68.0
2-year college	100.0	6.8	66.3	26.9
4-year college	100.0	35.4	56.3	8.4
Graduate school	100.0	48.7	45.2	6.1
High school program:				
General	100.0	8.9	36.6	54.5
Academic	100.0	34.2	50.2	15.7
Vocational-technical	100.0	3.4	25.7	70.9
Racial/ethnic group:				
White	100.0	19.2	39.6	41.2
Black	100.0	12.1	39.9	47.0
Hispanic	100.0	7.3	45.1	47.6
Other	100.0	12.4	36.7	50.8
Sex:				
Male	100.0	17.2	43.0	39.8
Female	100.0	18.6	36.4	45.0
Socioeconomic status:				
Low	100.0	7.1	29.5	63.4
Middle	100.0	14.7	39.5	45.8
High	100.0	35.2	50.3	14.5

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished data.

Chart 3.12
Educational Attainment of the High School Class of 1972
4 Years After High School

Among members of the high school class of 1972, only about 18 percent had earned a bachelor's degree by the fall of 1976.

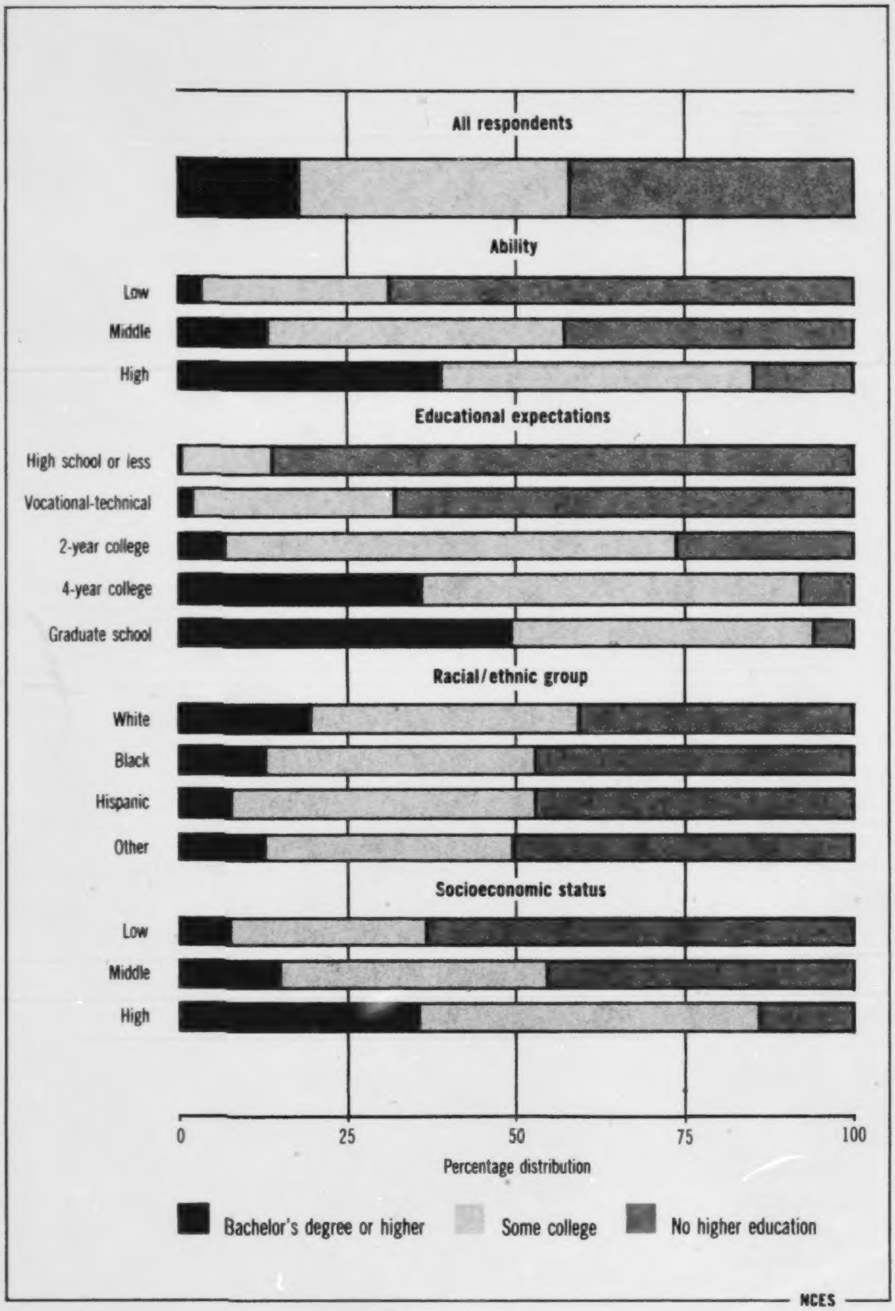

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Table 3.13
Students [1] enrolled in institutions of higher education, by level of institution and by length of interruption: February 1974

Incidence and length of interruption	University	Other 4-year institution	2-year institution
	(Number in thousands)		
TOTAL	2,404	3,635	2,874
None	1,288	1,898	926
Some	753	1,327	1,833
6 months or less	171	268	237
7-24 months	238	421	497
25-72 months	200	304	489
Over 72 months	104	278	538
Unclassifiable	40	55	72
Unknown	363	410	116
	Percentage distribution		
TOTAL:	**100.0**	**100.0**	**100.0**
None	**53.6**	**52.2**	**32.2**
Some	**31.3**	**36.5**	**63.8**
6 months or less	**7.1**	**7.4**	**8.2**
7-24 months	**9.9**	**11.6**	**17.3**
25-72 months	**8.3**	**8.4**	**17.0**
Over 72 months	**4.3**	**7.6**	**18.7**
Unclassifiable	**1.7**	**1.5**	**2.5**
Unknown	**15.1**	**11.3**	**4.0**

[1] Having less than master's degree.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, February 1974, and U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished tabulations.

Chart 3.13
Interruptions Experienced by Students in Higher Education

Many college students report interruptions in their education. Among students attending universities and other 4-year institutions, almost 50 percent reported interruptions, as did almost 70 percent of the students attending 2-year institutions.

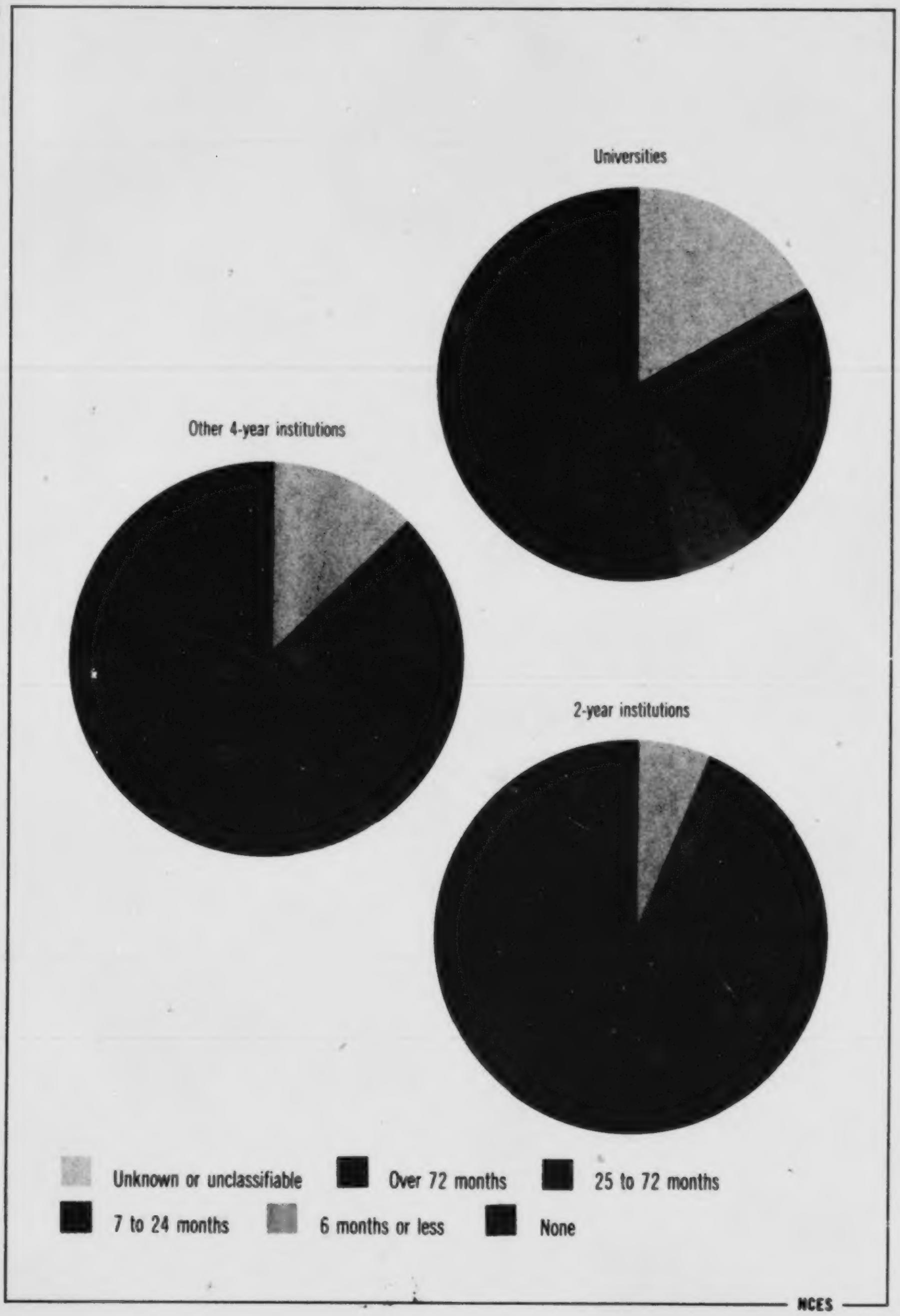

Table 3.14
Total withdrawal rate [1] for 2-year and 4-year college students [2] and graduation rate for 2-year college students by financial aid status, academic ability, race, educational aspirations, and socioeconomic status (SES): 1974

Student characteristic	Total withdrawal rate [3]				Graduation rate for 2-year college students	
	4-year college students		2-year college students			
	Aided	Not aided	Aided	Not aided	Aided	Not aided
Ability:						
Low	**37.0** (26.5)	**53.4** (44.9)	**53.1** (40.6)	**63.3** (54.8)	11.0	4.1
Middle	**26.0** (19.6)	**35.1** (27.7)	**39.3** (33.7)	**47.8** (40.9)	21.3	11.7
High	**14.4** (11.1)	**21.6** (17.2)	**18.6** (15.1)	**43.2** (37.7)	31.3	16.2
Race:						
White	**20.9** (15.6)	**29.0** (22.5)	**34.0** (25.5)	**49.1** (42.4)	25.5	12.2
Black	**24.4** (18.4)	**46.2** (37.5)	**43.5** (33.5)	**67.1** (58.0)	11.0	4.1
Educational aspirations:						
Vocational-technical school	**73.3** (53.0)	**79.9** (66.3)	**62.8** (48.4)	**79.5** (69.9)	13.1	5.1
2-year college	**53.8** (45.3)	**74.1** (51.8)	**60.0** (44.4)	**60.4** (51.7)	20.7	10.7
4-year college	**25.8** (19.9)	**30.9** (25.2)	**34.5** (29.3)	**41.8** (35.5)	24.2	11.3
Graduate school	**14.9** (10.9)	**20.2** (15.0)	**21.6** (16.0)	**36.0** (30.8)	22.7	15.7
Socioeconomic status (SES):						
Low	**30.8** (22.8)	**52.6** (43.0)	**46.7** (38.7)	**64.3** (56.3)	15.8	6.4
Middle	**22.6** (16.7)	**37.5** (30.2)	**34.5** (29.3)	**55.1** (46.6)	25.0	10.4
High	**14.4** (10.9)	**22.2** (16.4)	**25.0** (17.3)	**38.6** (33.3)	22.6	13.8

[1] Percentage of those in a given enrollment and financial aid status who have withdrawn.
[2] Includes those attending college in 1972 or 1973, but not in 1974.
[3] Includes those who withdrew for academic and nonacademic reasons. Figures in parentheses are nonacademic withdrawal rates; subtracting these figures from the ones preceding them will give academic withdrawal rates for that subgroup.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

Chart 3.14
Financial Aid Status and College Withdrawal Rates

College students who receive financial aid have lower withdrawal rates than those who do not.

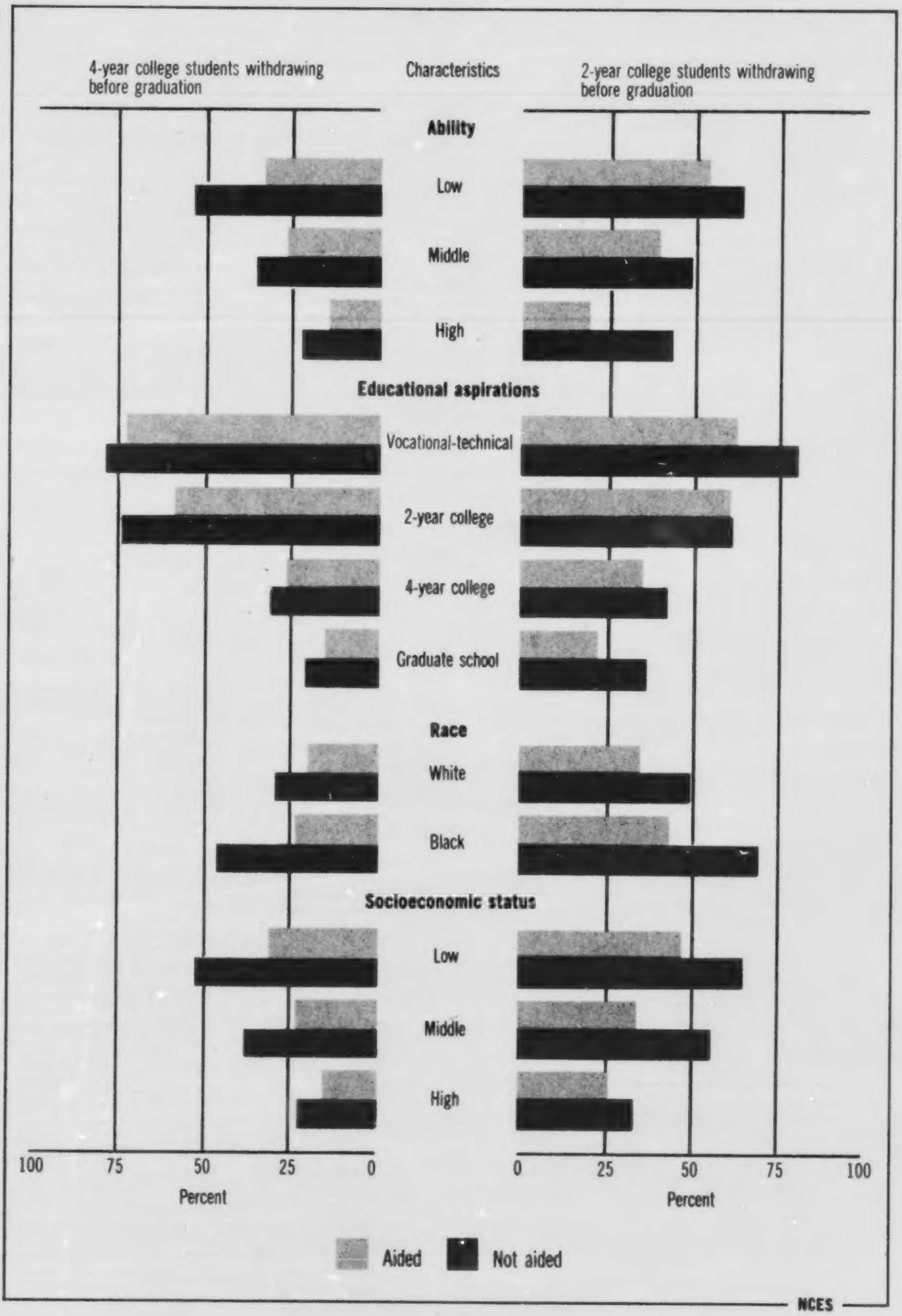

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Table 3.15
Educational attainment of students,[1] by financial aid status and other selected characteristics: 1976

	Highest level of education attained					
	Bachelor's degree			Some graduate school		
Characteristic	Total	Aided [2]	Not aided	Total	Aided [2]	Not aided
			(In percent)			
TOTAL	20.0	24.9	15.3	11.1	13.8	8.6
Ability:						
Low	6.8	10.7	3.7	4.6	5.9	3.5
Middle	16.3	21.7	12.1	6.6	8.3	5.2
High	28.8	32.3	24.8	16.6	20.2	12.3
Educational aspirations:						
High school or less	2.5	2.8	2.3	4.8	5.1	4.6
Vocational-technical	1.7	3.1	0.9	4.7	5.2	4.4
2-year college	5.1	8.5	3.0	4.2	4.4	4.1
4-year college	28.4	31.6	24.6	10.2	12.0	8.2
Graduate school	27.4	29.7	24.0	24.4	26.8	20.9
Racial/ethnic group:						
White	21.3	27.1	16.3	11.3	14.1	8.9
Black	14.2	17.2	6.8	10.5	11.3	8.8
Hispanic	5.2	7.0	3.0	8.7	11.8	4.9
Other	15.1	18.7	11.6	10.3	15.9	4.7
Sex:						
Male	17.3	21.7	13.2	11.3	14.2	8.6
Female	22.8	28.1	17.6	11.0	13.3	8.6
Socioeconomic status:						
Low	11.2	15.8	2.9	8.1	9.6	5.5
Middle	17.8	23.6	11.6	9.4	12.7	5.9
High	26.6	33.3	22.1	14.6	18.1	12.3

[1] Percentage of classifiable respondents in the National Longitudinal Study of the High School Class of 1972 who attended college at some time between 1972 and 1976.

[2] Received aid at some time between 1972 and 1976.

SOURCE: U.S Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished data.

Chart 3.15
Educational Attainment by Receipt of Financial Aid

Among college students in the National Longitudinal Study of the High School Class of 1972, those who received financial aid were more likely to have graduated from college by 1976.

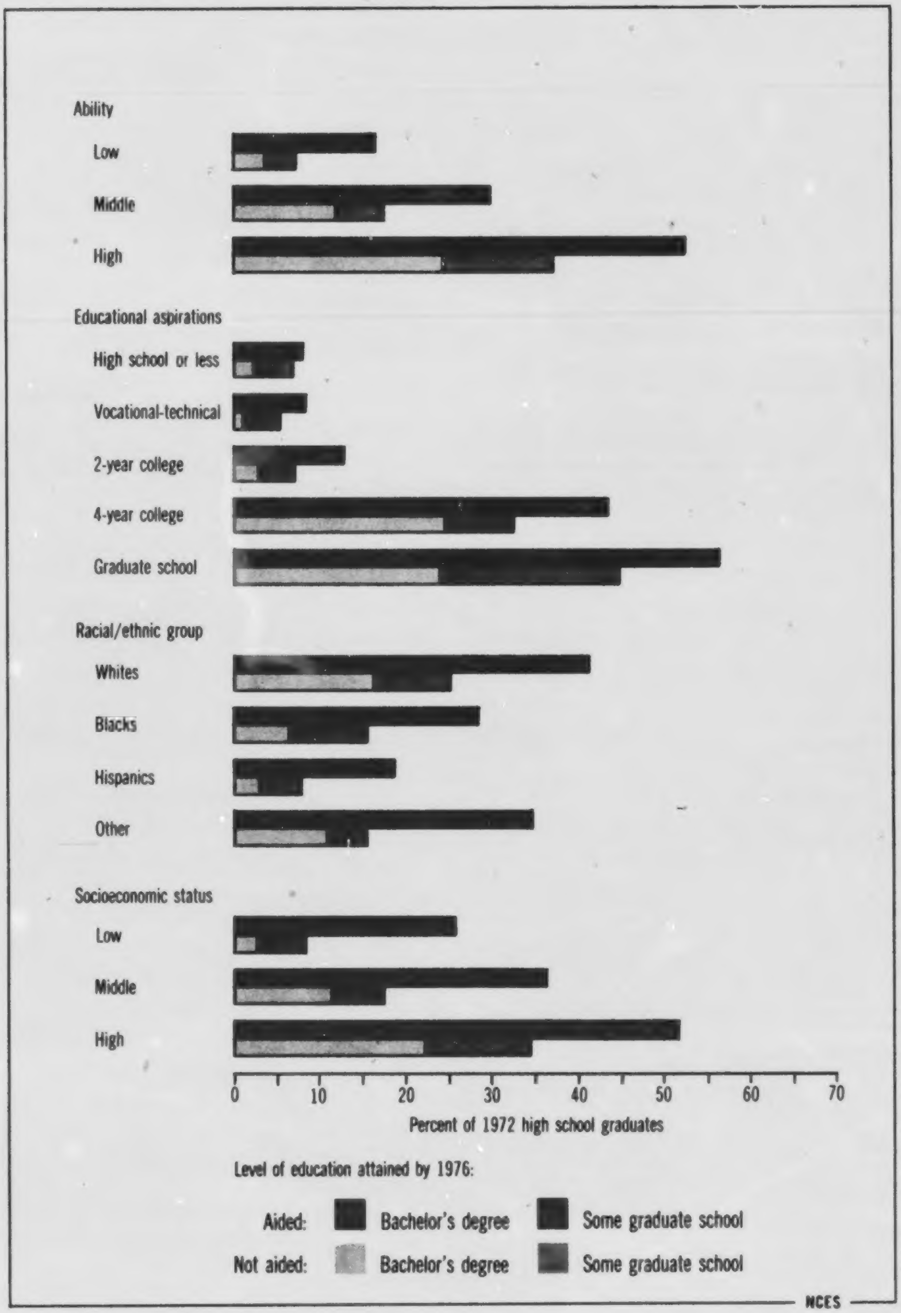

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Table 3.16
Earned degrees, by level and sex of student: 1964–65 to 1980–81

Academic year ending	Bachelor's degrees			First-professional degrees			Master's degrees			Doctor's degrees (except first-professional)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1965	501,248	288,538	212,710	28,755	27,748	1,007	117,152	77,544	39,608	16,467	14,692	1,775
1966	520,248	299,196	221,052	30,799	29,657	1,142	140,548	93,063	47,485	18,237	16,121	2,116
1967	558,075	322,171	235,904	32,472	31,178	1,294	157,707	103,092	54,615	20,617	18,163	2,454
1968	631,923	357,270	274,653	34,787	33,237	1,550	176,749	113,519	63,230	23,089	20,183	2,906
1969	728,167	409,881	318,286	36,018	34,499	1,519	193,756	121,531	72,225	26,188	22,752	3,436
1970	791,510	450,234	341,276	35,724	33,940	1,784	208,291	125,624	82,667	29,866	25,890	3,976
1971	839,730	475,594	364,136	37,946	35,544	2,402	230,509	138,146	92,363	32,107	27,530	4,577
1972	887,273	500,590	386,683	43,411	40,723	2,688	251,633	149,550	102,083	33,363	28,090	5,273
1973	922,362	518,191	404,171	50,018	46,489	3,529	263,371	154,468	108,903	34,777	28,571	6,206
1974	945,776	527,313	418,463	53,816	48,530	5,286	277,033	157,842	119,191	33,816	27,365	6,451
1975	922,933	504,841	418,092	55,916	48,956	6,960	292,450	161,570	130,880	34,083	26,817	7,266
1976	925,746	504,925	420,821	62,649	52,892	9,757	311,771	167,248	144,523	34,064	26,267	7,797
						Projected						
1977	980,000	532,000	448,000	61,800	50,250	11,550	322,200	170,900	151,300	35,300	26,800	8,500
1978	963,000	506,000	457,000	65,400	51,580	13,820	334,100	175,000	159,100	36,200	27,200	9,000
1979	996,000	533,000	463,000	66,600	51,390	15,210	346,800	179,800	167,000	37,100	27,600	9,500
1980	1,010,000	541,000	469,000	68,000	51,700	16,300	360,100	184,000	176,100	38,000	28,000	10,000
1981	1,021,000	547,000	474,000	69,700	52,460	17,240	373,200	189,200	184,000	38,900	28,400	10,500

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986–87*, forthcoming.

Chart 3.16
Earned Degrees, by Level and by Sex

The number receiving degrees is increasing faster for females than for males, but females still receive less than half of all college degrees.

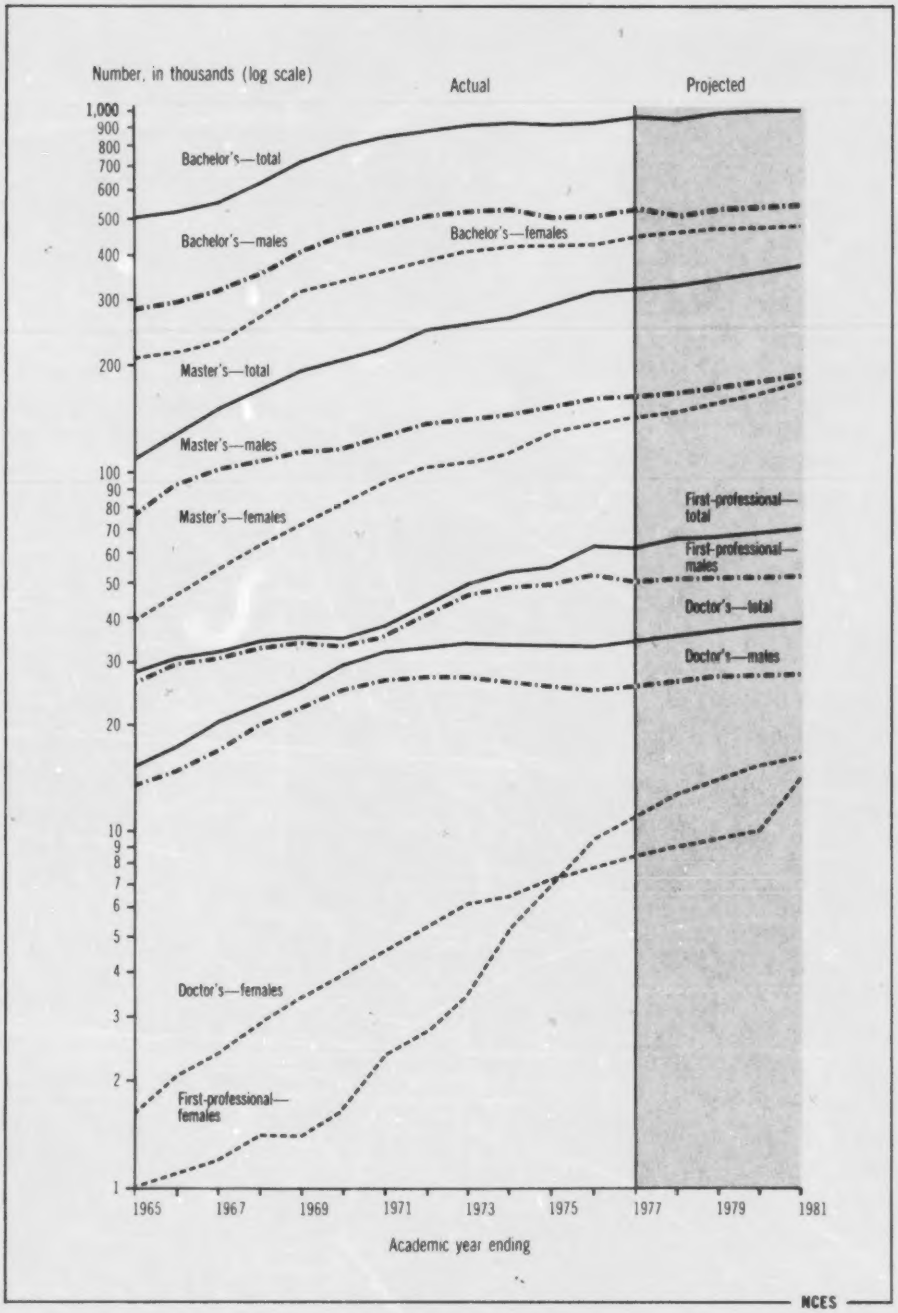


Table 3.17
Higher education degrees earned by racial/ethnic group and sex: Aggregate United States, 1975–76

Level of degree	Total		White [1]		Black [1]		Hispanic		American Indian/ Alaskan native		Asian or Pacific Islander		Nonresident alien	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Associate:														
Total	**488,677**	**100.0**	**413,100**	**84.5**	**40,965**	**8.4**	**22,714**	**4.6**	**2,517**	**0.5**	**5,695**	**1.2**	**3,686**	**0.8**
Male	256,782	100.0	219,019	85.3	19,163	7.5	11,838	4.6	1,298	0.5	3,003	1.2	2,461	1.0
Female	231,895	100.0	194,081	83.7	21,802	9.4	10,876	4.7	1,219	0.5	2,692	1.2	1,225	0.5
Bachelor's:														
Total	**927,085**	**100.0**	**811,772**	**87.6**	**59,187**	**6.4**	**26,220**	**2.8**	**3,498**	**0.4**	**11,323**	**1.2**	**15,085**	**1.6**
Male	503,226	100.0	444,768	88.4	25,660	5.1	13,594	2.7	1,916	0.4	6,359	1.3	10,929	2.2
Female	423,859	100.0	367,004	86.6	33,527	7.9	12,626	3.0	1,582	0.4	4,964	1.2	4,156	1.0
Master's:														
Total	**310,493**	**100.0**	**262,851**	**84.7**	**20,351**	**6.6**	**6,379**	**2.1**	**795**	**0.3**	**4,037**	**1.3**	**16,080**	**5.2**
Male	165,971	100.0	139,539	84.1	7,809	4.7	3,316	2.0	432	0.3	2,499	1.5	12,376	7.5
Female	144,522	100.0	123,312	85.3	12,542	8.7	3,063	2.1	363	0.3	1,538	1.1	3,704	2.6
Medicine:														
Total	**13,487**	**100.0**	**11,993**	**88.9**	**708**	**5.2**	**304**	**2.3**	**47**	**0.3**	**227**	**1.7**	**208**	**1.5**
Male	11,294	100.0	10,163	90.0	504	4.5	245	2.2	36	0.3	177	1.6	169	1.5
Female	2,193	100.0	1,830	83.4	204	9.3	59	2.7	11	0.5	50	2.3	39	1.8
Law:														
Total	**32,483**	**100.0**	**29,520**	**90.9**	**1,519**	**4.7**	**858**	**2.6**	**75**	**0.2**	**312**	**1.0**	**199**	**0.6**
Male	26,237	100.0	23,999	91.5	1,102	4.2	697	2.7	59	0.2	230	0.9	150	0.6
Female	6,246	100.0	5,521	88.4	417	6.7	161	2.6	16	0.3	82	1.3	49	0.8
Ph.D. or Ed.D.:														
Total	**33,799**	**100.0**	**27,435**	**81.2**	**1,213**	**3.6**	**407**	**1.2**	**93**	**0.3**	**583**	**1.7**	**4,068**	**12.0**
Male	26,016	100.0	20,853	80.2	771	3.0	294	1.1	77	0.3	480	1.8	3,541	13.6
Female	7,783	100.0	6,582	84.6	442	5.7	113	1.5	16	0.2	103	1.3	527	6.8

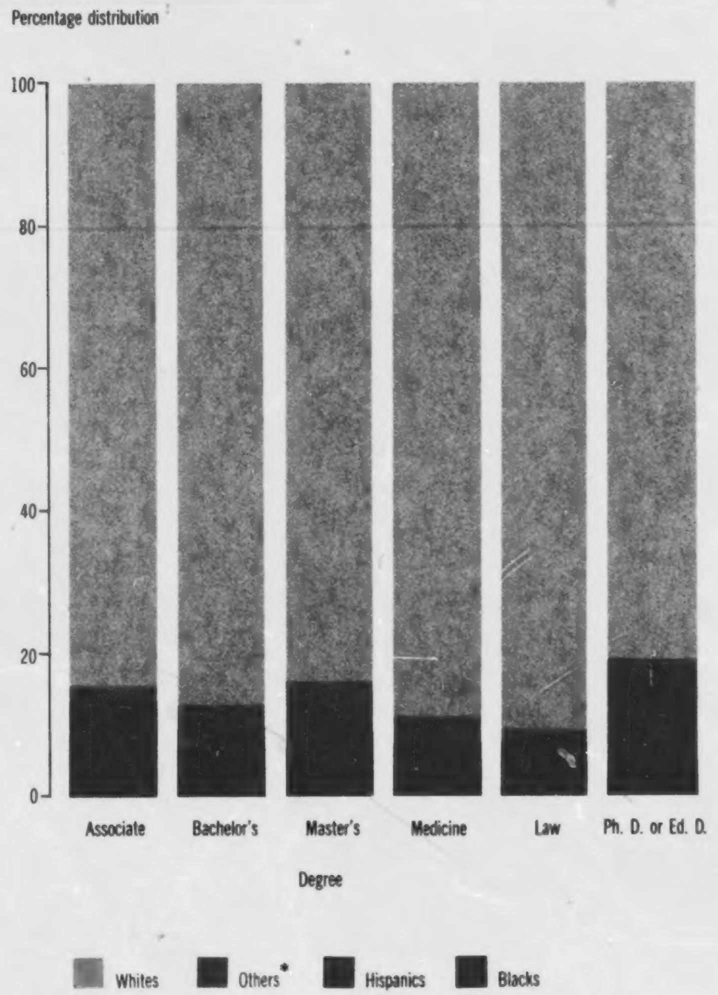
[1] Non-Hispanic.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Civil Rights and National Center for Education Statistics, unpublished tabulations.

Chart 3.17
Degrees Earned by Racial/Ethnic Group

Blacks earned less than 6 percent of the medical, law, and doctoral degrees conferred in 1975-76.



*Includes American Indians/Alaskan Natives, Asians or Pacific Islanders, and nonresident aliens.

Table 3.18
Number of advanced engineering degrees [1] and first-professional degrees conferred, by field: 1969–70 to 1977–78

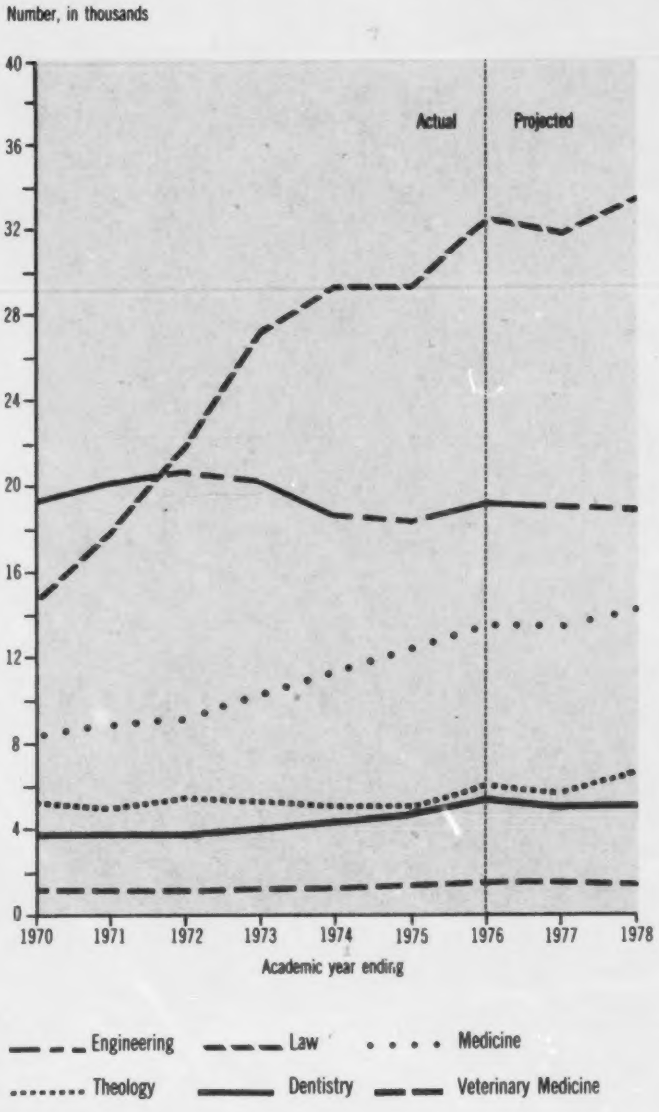
Academic year ending	Advanced engineering degrees	Theology	Veterinary medicine	Dentistry	Medicine	Law
1970	19,274	5,298	1,206	3,718	8,314	14,916
1971	20,081	5,055	1,252	3,745	8,919	17,421
1972	20,631	5,568	1,247	3,862	8,253	21,764
1973	20,111	5,283	1,299	4,047	10,307	27,205
1974	18,691	5,041	1,384	4,440	11,356	29,326
1975	18,456	5,095	1,415	4,773	12,447	29,296
1976	19,163	5,706	1,532	5,425	13,426	32,293
			Projected			
1977	19,060	5,370	1,600	5,160	13,440	31,920
1978	19,030	6,460	1,630	5,110	14,210	33,580

[1] Includes M.A. and Ph.D. degrees in all fields of engineering.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Earned Degrees Conferred* and *Projections of Education Statistics to 1986–87.*

Chart 3.18
Advanced Engineering Degrees* and First-Professional Degrees, by Field

Between 1970 and 1976 the number of degrees earned in law increased 116 percent; in medicine, 61 percent; in dentistry, 46 percent; and in veterinary medicine, 27 percent.



*M.A. and Ph. D. degrees in all fields of engineering.

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Table 3.19
Employment status and average salaries of 1974–75 bachelor's degree recipients, by major degree field: May 1976

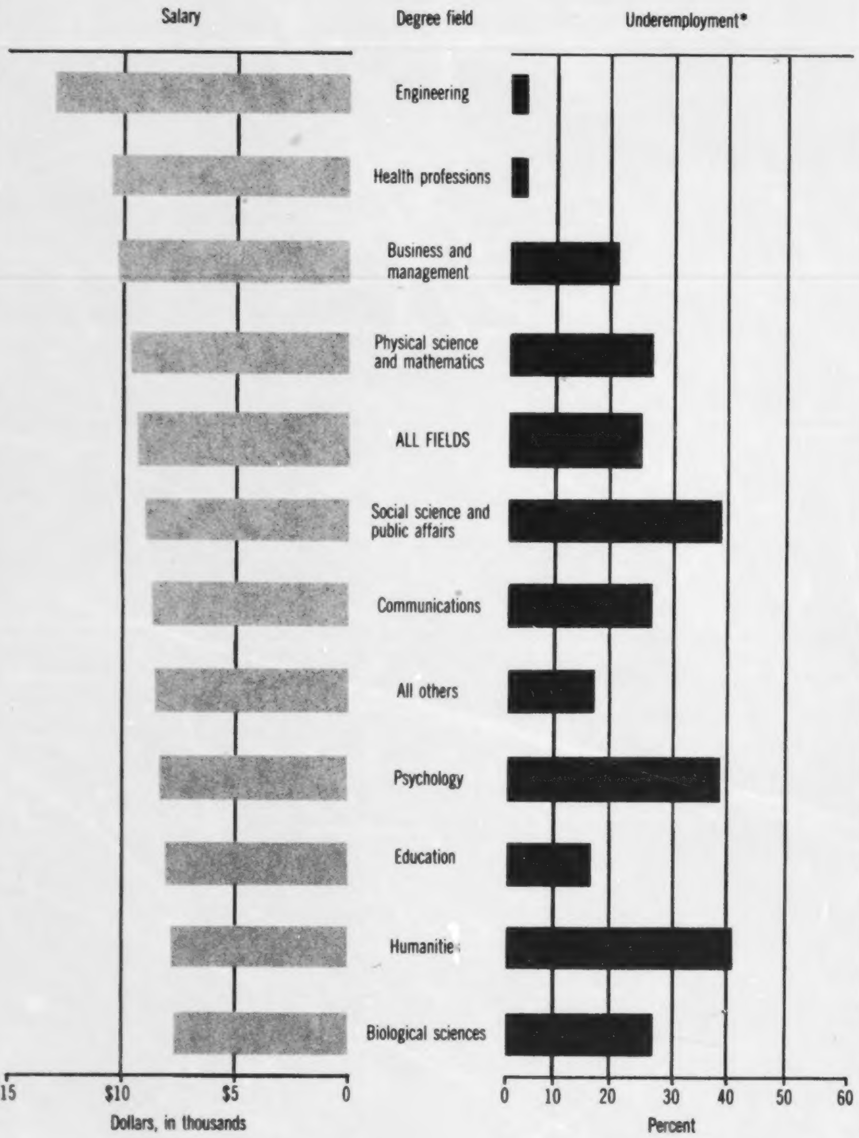
Major degree field	Bachelor's degrees earned		Working full-time	Average annual salary	Percent under-employed
	Number	Percent			
TOTAL	931,700	100	622,400	$9,400	24
Biological sciences	69,200	7	40,800	7,900	26
Engineering	59,400	6	47,100	13,400	4
Physical sciences and mathematics	38,200	4	18,300	9,900	26
Psychology	52,400	6	32,400	8,500	38
Social sciences and public affairs	147,000	16	85,400	9,100	38
Humanities	99,100	11	52,600	8,000	41
Business and management	157,800	17	131,500	10,500	21
Education	181,700	20	127,600	8,100	16
Health professions	55,600	6	37,700	10,600	4
Communications	19,500	2	14,400	8,900	26
Other	51,800	6	34,700	8,800	17

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of 1974–75 College Graduates, unpublished tabulations.

Chart 3.19
Average Salary and Underemployment of Recent Recipients of Bachelor's Degrees

Among recent college graduates, those with degrees in engineering were earning higher salaries and were less likely to be underemployed than those with degrees in other fields.



*A college graduate working full-time is classified as underemployed if he or she is in a job that is not professional, technical, managerial, or administrative and, when asked, has stated that his or her job did not require a college degree.

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Table 3.20
Adult education participation [1], by type of course: 1969, 1972, and 1975

Type of course	Year ending in May		
	1969	1972	1975
TOTAL PARTICIPANTS (in thousands)	13,041	15,734	17,059
Percent participating, by type of course: [2]			
Occupational training	**44.6**	**46.5**	**48.7**
General education	**27.2**	**25.9**	**20.6**
Personal and family living	**12.1**	**14.0**	**14.8**
Social life and recreation	**11.9**	**12.0**	**15.9**
Community issues	**9.2**	**9.8**	**10.0**
Other	**3.9**	**2.6**	**2.6**

[1] Includes only participants, 17 years old or over, who were not full-time students in high school or college.

[2] Percents do not total to 100.0 percent because some participants take more than one type of course.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Participation in Adult Education*, 1969, 1972, and 1975.

Chart 3.20
Adult Education Participation by Type of Course

Between 1969 and 1975 adult education participation increased in courses related to social life and recreation, personal and family living, and occupational training.

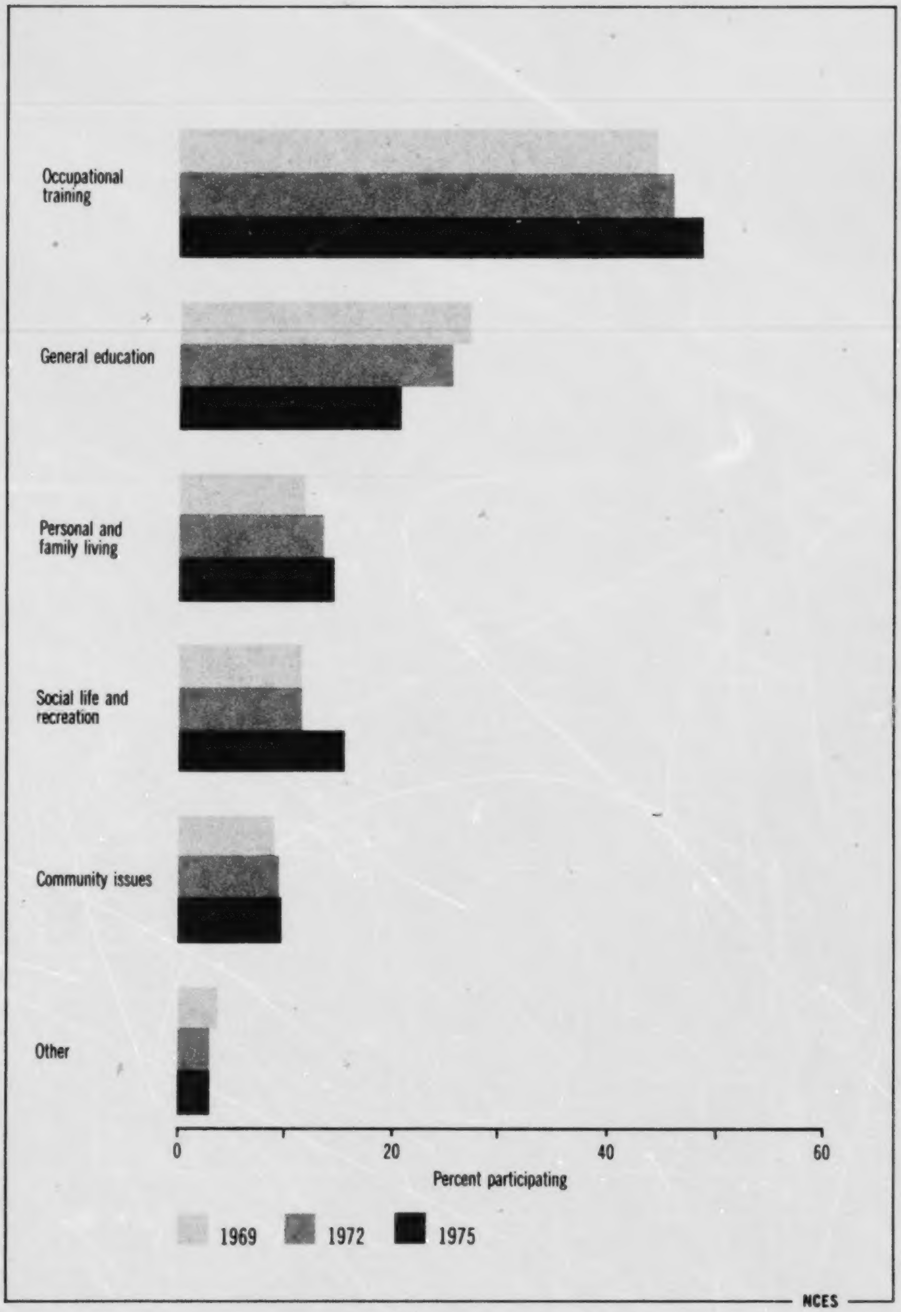

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Table 3.21
Percentage distribution of adults and participants in adult education, by years of school completed: Year ending May 1975

Highest number of school years completed	Adult population[1]	Adult education participants[1]
TOTAL	146,602	17,059
Elementary (0 to 8 years)	**18.1**	**3.1**
Some high school (1 to 3 years)	**18.4**	**7.2**
High school (4 years)	**36.7**	**37.5**
Some college (1 to 3 years)	**14.3**	**21.6**
College (4 years)	**7.8**	**18.1**
College (5 or more years)	**4.8**	**12.5**

[1] Includes those who were not full-time students in high school or college aged 17 years and over.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Adult Education Participation, 1975.*

Chart 3.21
Educational Attainment of Adults and Adult Education Participants

Adult education participants are more likely than the general adult population to have attended college.

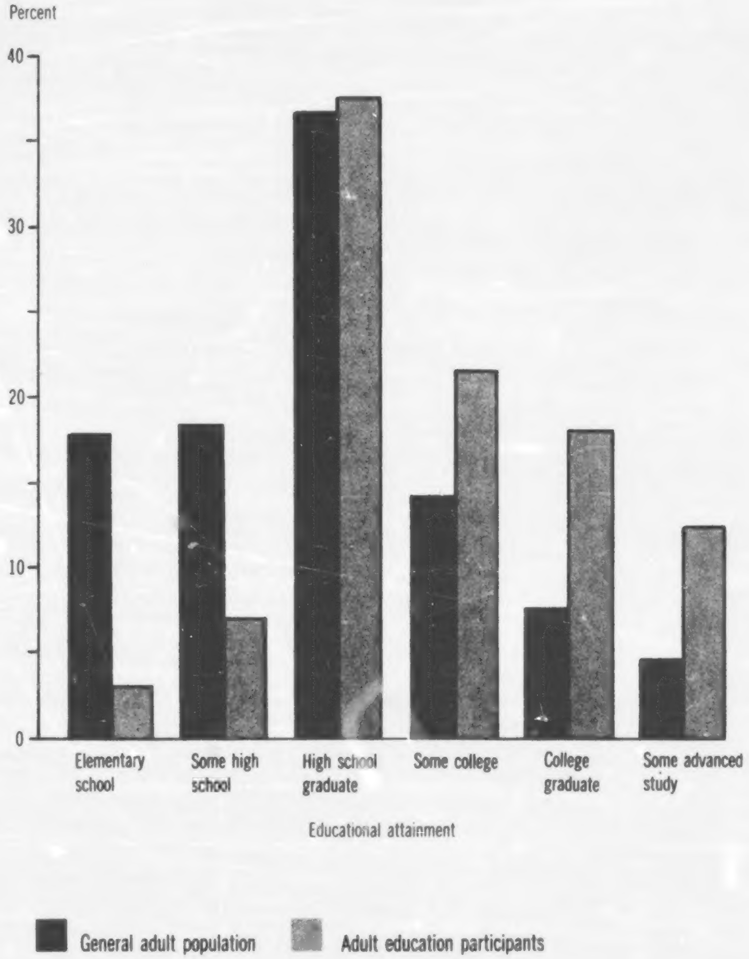

Table 3.22a
Number of participants in adult basic and secondary education programs, by racial/ethnic group: Aggregate United States, fiscal year 1976

Item	Total	American Indian	Black	Asian American	Hispanic	White and other
Number	1,651,094	17,277	394,440	137,178	360,223	741,976
Percent	**100.0**	**1.0**	**23.9**	**8.3**	**21.8**	**44.9**

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Adult Basic Education 1976.*

Table 3.22b
Selected characteristics of participants in adult basic and secondary education programs: Aggregate United States, fiscal years 1972 to 1976

Item	Fiscal year 1972	1973	1974	1975	1976
	Number				
Total	**820,514**	**822,469**	**965,116**	**1,221,210**	**1,651,094**
	Percentage distribution				
Age group:					
Total	**100**	**100**	**100**	**100**	**100**
16–24 years	**37**	**36**	**37**	**40**	**42**
25–34 years	**27**	**27**	**27**	**28**	**27**
35–44 years	**19**	**18**	**18**	**16**	**16**
45–54 years	**12**	**11**	**10**	**9**	**8**
55 years and over	**8**	**8**	**8**	**7**	**7**
Total	100	100	100	100	100
Male	44	43	44	45	45
Female	56	57	56	55	55

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Adult Basic Education 1976.*

Chart 3.22
Participants in Adult Basic and Secondary Education

The number of participants in adult basic and secondary education more than doubled between 1972 and 1976. Over 50 percent of the participants in 1976 were black, Asian, or Hispanic.

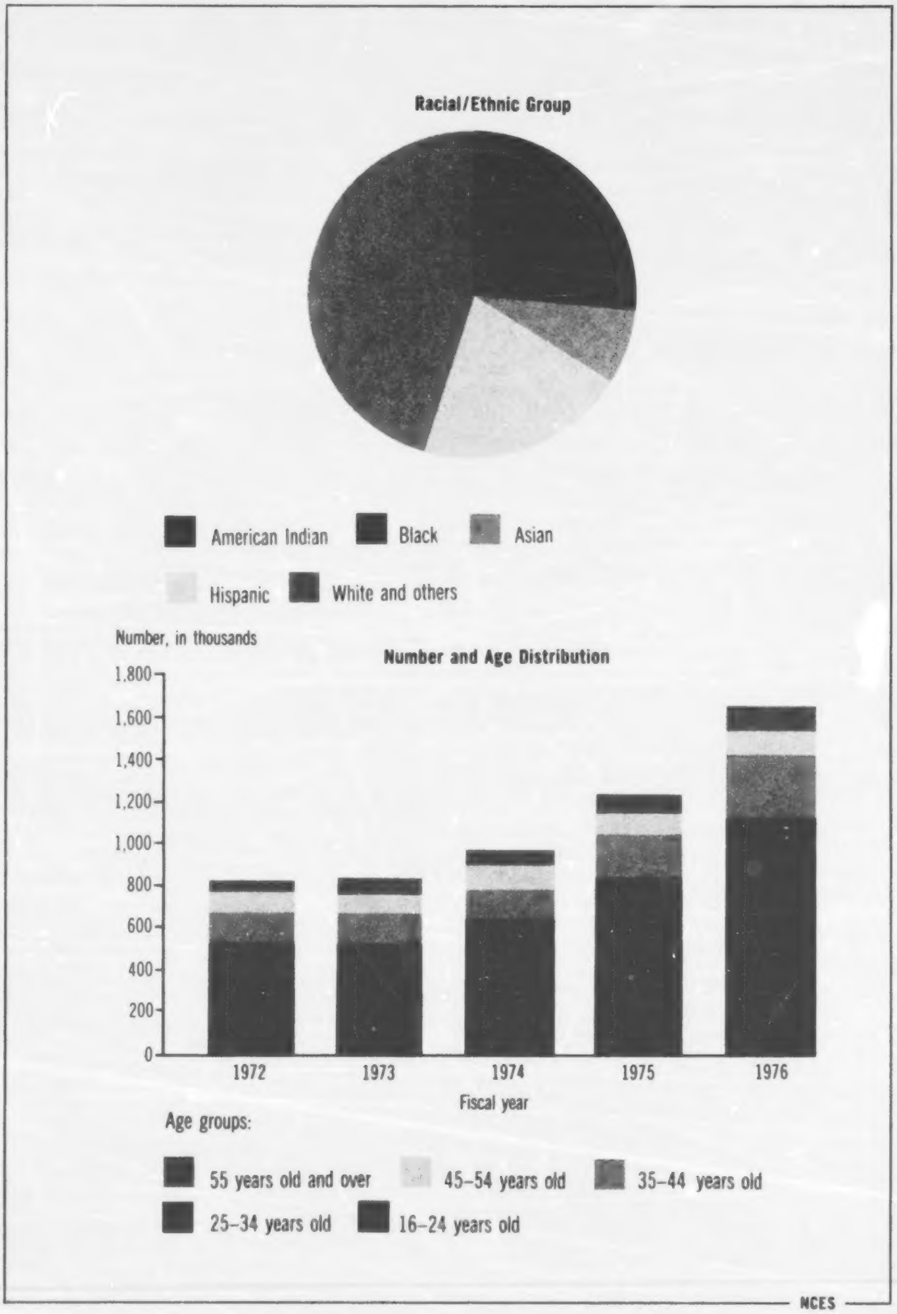

Table 3.23
Adult education participation [1] by type of sponsor: 1969, 1972 and 1975

Type of sponsor	Year ending in May		
	1969	1972	1975
TOTAL PARTICIPANTS (in thousands)	13,041	15,734	17,059
Percent participating, by sponsor of course: [2]			
4-year college or university	21.7	21.4	19.1
Employer	17.4	16.6	15.3
Elementary or secondary school	15.1	14.0	11.0
Community organization	11.9	12.7	10.5
2-year college or technical-vocational institute	11.9	16.3	17.7
Trade, vocational or business school	11.5	8.9	8.6
Labor organization or professional association	19.6	5.5	6.1
Private instructor		6.0	6.9
Government agency		9.8	8.0
Correspondence school			3.6
Other			7.7
Not reported	0.4	0.6	0.4

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[1] Includes only participants 17 years old or over who were not full-time students in high school or college.

[2] Percents do not total to 100.0 percent because some participants take courses from more than one type of sponsor.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Participation in Adult Education*, 1969, 1972, and 1975.

Chart 3.23
Adult Education Participation by the Type of Course Sponsor

The proportion of adult education participants taking courses sponsored by universities and other 4-year institutions has declined since 1969, while it has increased for courses sponsored by 2-year institutions and technical-vocational institutes.

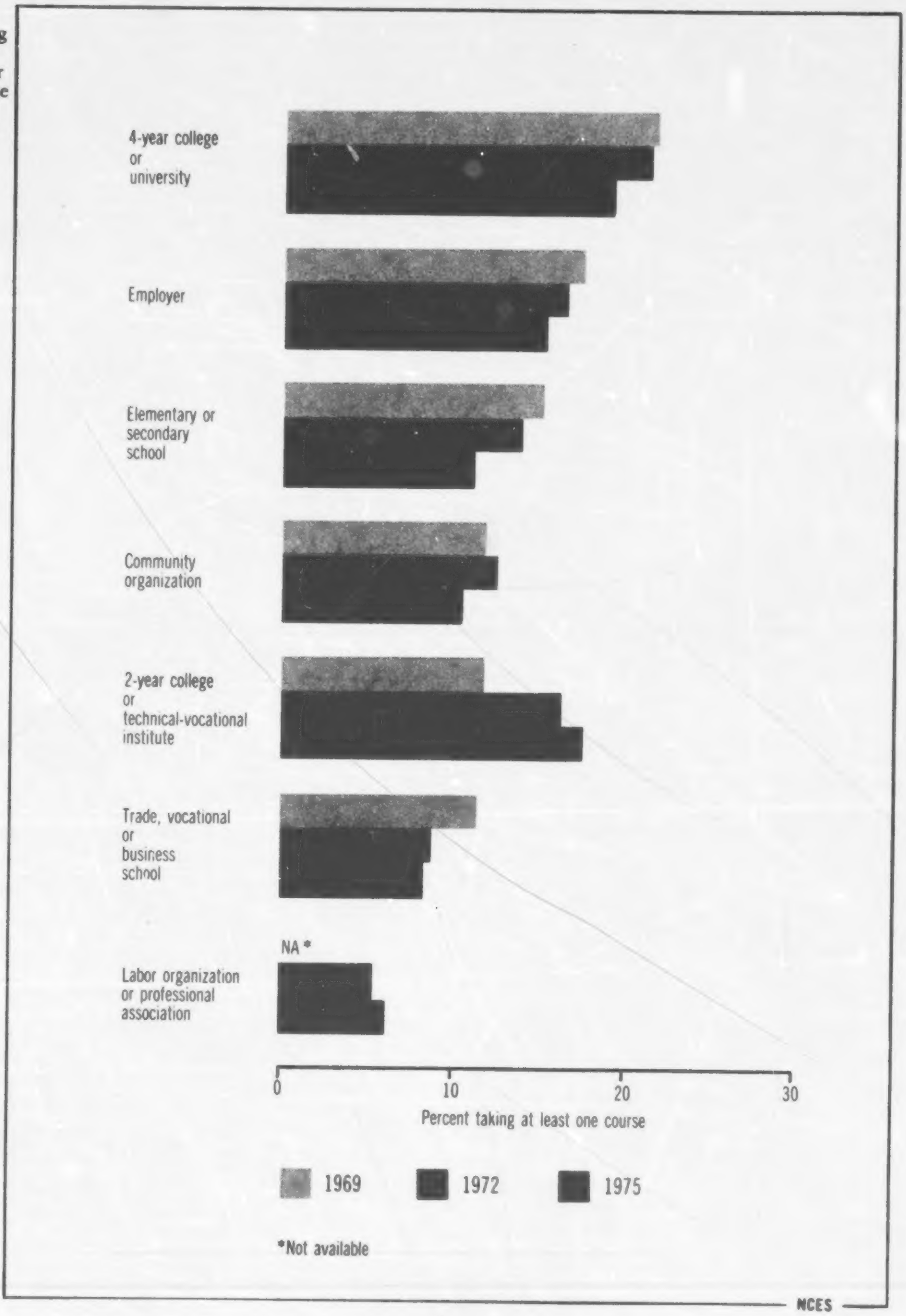

Table 3.24

Noncredit activities in adult and continuing education in institutions of higher education by control and level of institution: 1967–68 and 1975–76

Control and level of institution	Registrations		Number of institutions sponsoring activities	
	1967–68	1975–76	1967–68	1975–76
Public	4,877,297	7,874,104	621	1,304
University	3,754,580	2,048,207	91	92
Other 4-year	390,948	1,702,098	169	367
2-year	731,769	4,123,799	361	845
Private	766,661	959,894	481	921
University	399,268	483,788	55	65
Other 4-year	311,083	421,880	365	709
2-year	56,310	54,226	61	147

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Noncredit Activities in Institutions of Higher Education*, 1976.

Chart 3.24
Noncredit Activities in Institutions of Higher Education

Registrations in noncredit activities in adult and continuing education increased about 61 percent in public institutions of higher education and about 25 percent in private institutions between 1967–68 and 1975–76.

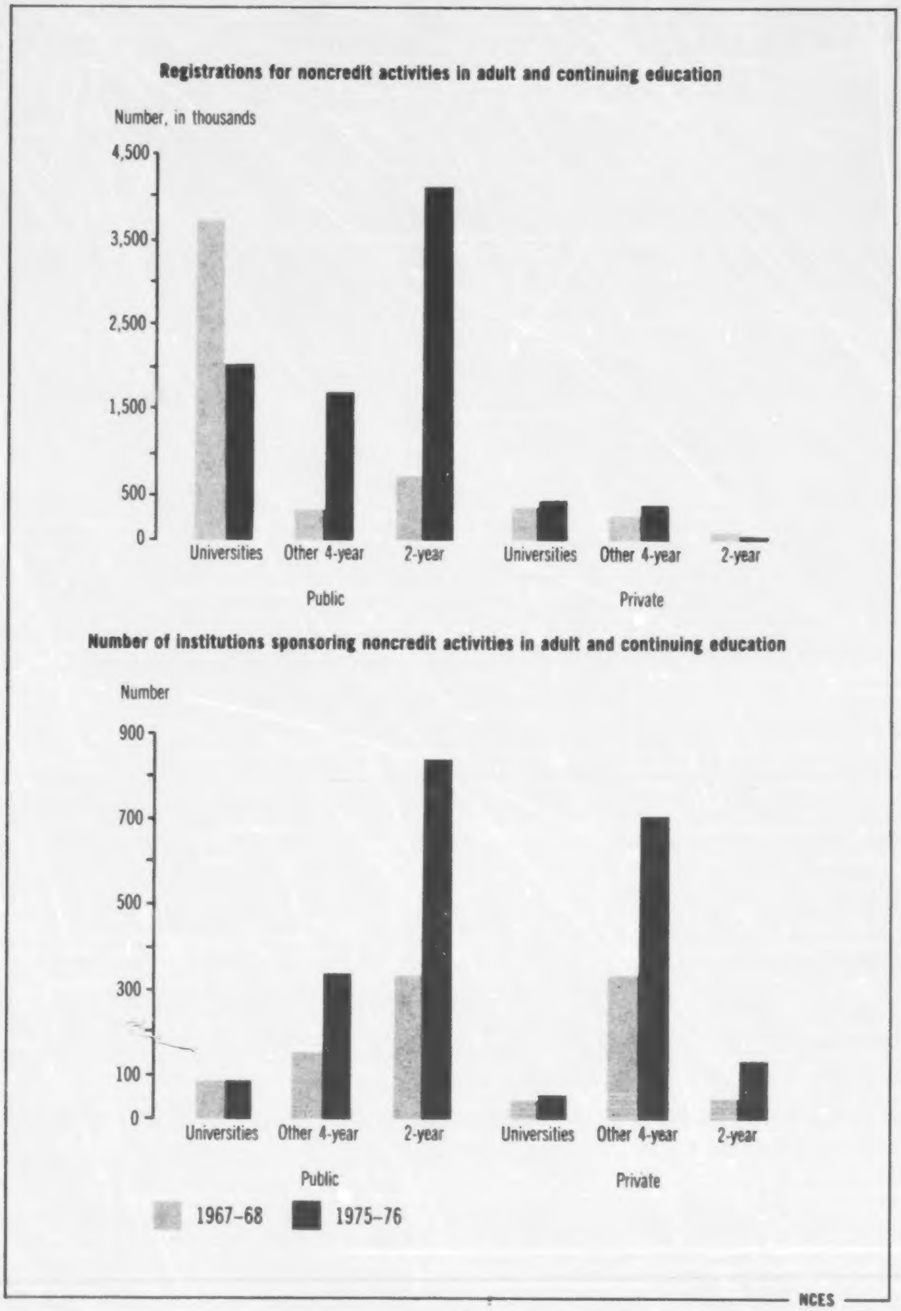

Table 3.25
Enrollment in federally aided vocational education classes by level and type of program: Aggregate United States, fiscal years, 1968, 1972, and 1976

Level and type of program	FY 1968		FY 1972		FY 1976	
	Number	Percent	Number	Percent	Number	Percent
ADULT						
Total	2,987,070	100.0	3,096,053	100.0	3,965,314	100.0
Agriculture	**305,357**	10.2	**258,212**	8.3	**279,870**	7.1
Distributive	**349,730**	11.7	**274,849**	8.9	**347,384**	8.8
Health	**52,865**	1.8	**99,720**	3.2	**286,781**	7.2
Home economics	**677,478**	22.7	**746,097**	24.1	**763,817**	19.3
Office	**443,481**	14.8	**483,969**	15.6	**670,125**	16.9
Technical	**127,418**	4.3	**108,781**	3.5	**139,396**	3.5
Trades and industry	**1,030,723**	34.5	**1,088,806**	35.2	**1,191,424**	30.0
Other	**18**	([1])	**35,619**	1.2	[2]**286,517**	7.2
POSTSECONDARY						
Total	592,970	100.0	1,336,191	100.0	2,169,112	100.0
Agriculture	**11,036**	1.9	**34,924**	2.6	**67,663**	3.1
Distributive	**44,824**	7.6	**102,844**	7.7	**192,436**	8.8
Health	**64,592**	10.9	**177,466**	13.3	**290,007**	13.4
Home economics	**4,395**	0.7	**68,604**	5.1	**47,756**	2.2
Office	**225,182**	38.0	**360,245**	27.0	**620,102**	28.6
Technical	**104,746**	17.7	**189,468**	14.2	**309,879**	14.3
Trades and industry	**137,732**	23.2	**356,879**	26.7	**565,594**	26.1
Other	**463**	([1])	**45,761**	3.4	**75,675**	3.5

[1] Less than 0.5 percent.

[2] Includes 180,798 in voluntary fire fighter training.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Selected Vocational Education Statistics*, 1968, 1972, and 1976.

Chart 3.25
Enrollment in Federally Aided Adult and Postsecondary Vocational Education Classes

Enrollment in Federally aided adult education and postsecondary education classes increased 33 percent and 25 percent, respectively, between 1968 and 1976.

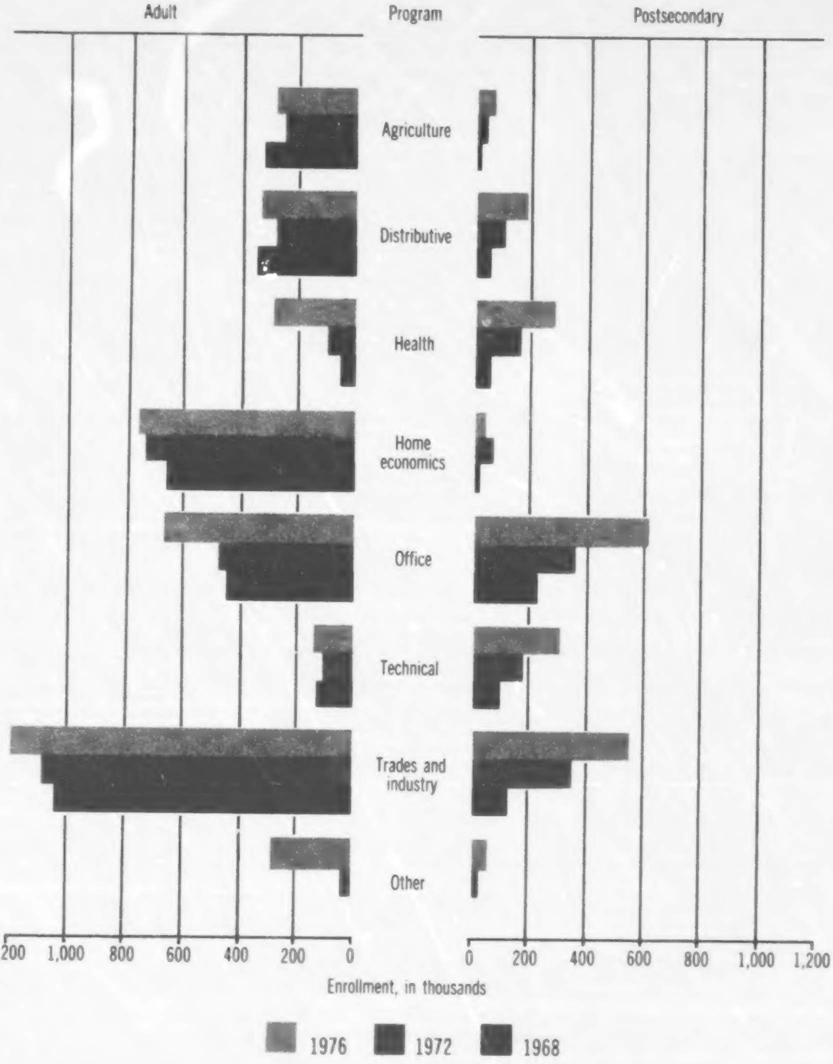

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Table 3.26
Noncollegiate postsecondary schools offering occupational programs, by control and type of school: 1973 and 1975

Type of school	Total		Public		Private[1]	
	1973	1975[2]	1973	1975[2]	1973	1975[2]
TOTAL	8,846	8,356	893	964	7,953	7,392
Vocational/technical	**1,167**	**1,187**	579	594	588	593
Technical institute	**215**	**210**	52	38	163	172
Business/commercial	**1,242**	**1,140**	1	1	1,241	1,139
Cosmetology/barber	**2,405**	**2,328**	4	21	2,401	2,307
Flight	**1,483**	**1,309**	6	44	1,477	1,265
Trade	**708**	**723**	30	30	678	693
Home study (correspondence)	**130**	**106**	1	0	129	106
Hospital	**1,247**	**1,112**	170	215	1,077	897
Other	**249**	**241**	50	21	199	220

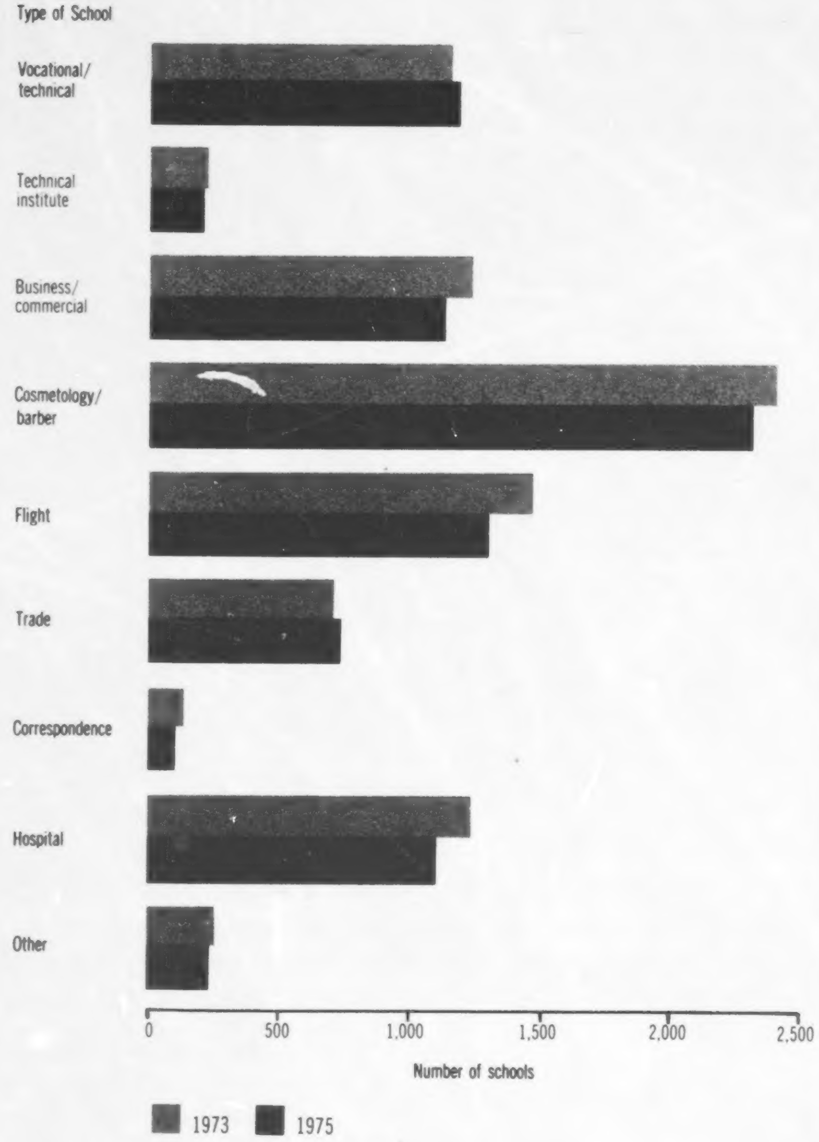
[1] Includes proprietary (for profit) schools, independent (nonprofit) schools, and hospitals operated by religious groups.

[2] Data include Puerto Rico as well as the 50 States and D.C.

SOURCE: U.S. Department of Health, Education, and Welfare, Natural Center for Education Statistics, *Directory of Postsecondary Schools With Occupational Programs*, 1973–74 and 1975–76.

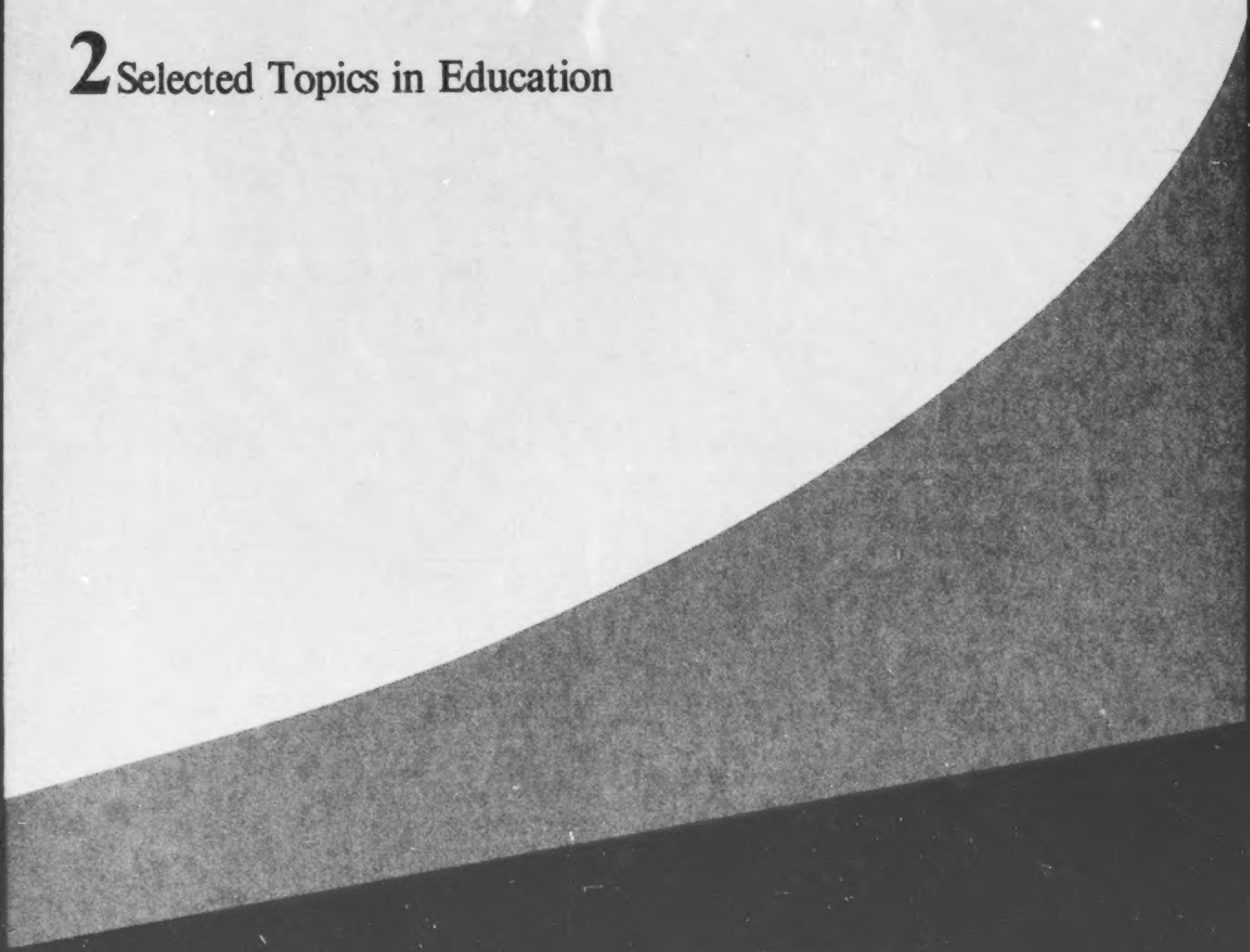
Chart 3.26
Noncollegiate Postsecondary Schools Offering Occupational Programs

Between 1973 and 1975, the total number of noncollegiate postsecondary schools offering occupational programs decreased, although the number of such public schools increased.



The Condition of Education

2 Selected Topics in Education



Chapter 4
Education Personnel

by A. Stafford Metz,
Jay Noell, and
Harold B. Wheeler

Education has become a full-time activity for about 63.7 million Americans. In addition to the many who are students, over 5.2 million are employed by education institutions as teachers and in various other professional and nonprofessional capacities. In view of declining enrollments in elementary and secondary schools and the projected small growth in most areas of higher education, an examination of the present status of these employees and the outlook for them is appropriate.

Although employment of teachers depends most directly on changes in enrollments, the employment prospects of all who have jobs in education are affected. In 1976, among the nearly 3.9 million full-time-equivalent positions in public elementary and secondary education, approximately 1.5 million (about 40 percent) were filled by people other than teachers (entry 4.1). These people included administrators (4.3 percent of all full-time-equivalent staff); professionals (1.5 percent) such as psychologists, social workers, and nurses; and nonprofessionals (33.9 percent), including teacher's aides. Teachers and other professional educators (such as curriculum and remedial education specialists) were of course the largest occupational group, filling over 2.3 million positions (some 60 percent of the total full-time-equivalent staff).

In higher education in 1976, the proportion of the full-time-equivalent staff not engaged in the primary purposes of instruction and research was also substantial. Of the over 1.5 million full-time-equivalent positions in higher education, executives, administrators, and managers filled 6.4 percent of them; support specialists, 10.6 percent; and nonprofessionals, 45.1 percent. Only 37.8 percent (about 583,000) of the full-time-equivalent positions were for instruction and research.

Most attention has, however, been focused on teachers and more information is available about their prospects and conditions. The remainder of this chapter will present detailed data about teachers in elementary and secondary schools and institutions of higher education.

Elementary and Secondary School Teachers

The nationwide shortage of newly qualified teachers that existed during the 1960's came to an end by 1969 and since then a surplus has developed. A survey of recipients of bachelor's and master's degrees in 1974–75 indicates that nationally the surplus of beginning teachers continued into the 1975–76 school year (entry 4.2). Among the recent college graduates surveyed, 21 percent (or approximately 261,000) were bachelor's and master's degree recipients eligible to teach for the first time. Of these newly qualified teachers, 23 percent (about 60,000) had not applied for a teaching job within about one year after graduation. But of those who did apply, only about 54 percent (109,000) had obtained a full-time teaching position for the 1975–76 school year. The balance constituted a national surplus of about 92,000 newly qualified teachers.

Among newly qualified teachers, employment prospects varied with their degree levels and fields of specialization (entry 4.3). Some 67 percent of the newly qualified applicants with master's degrees got full-time teaching jobs, compared to 53 percent of those with bachelor's degrees. And a higher proportion (59 percent) of newly qualified applicants in elementary education got full-time teaching jobs than did the applicants in secondary education (47 percent). Within instructional fields, those applying in special education were most likely to find full-time employment (70 percent), followed by vocational education (64 percent) and physical education (62 percent). In no other field was the placement success rate as high as 60 percent.

Although the job outlook for teachers is not encouraging, newly qualified teachers in 1975-76 were at least as successful getting jobs as were persons trained in most other fields. Unemployment for those newly qualified to teach, for example, was 5 percent, while for all other graduates it was 8 percent. As noted previously (entry 3.19), the underemployment of those in education was below average: for newly qualified teachers it was 18 percent, compared to 26 percent for all other graduates. Too, a larger proportion of newly qualified teachers (education majors) than other graduates reported that they had jobs closely related to their field of training, 63 percent as opposed to 51 percent. And finally, although the average salary for bachelor's degree recipients working as beginning teachers was only $8,300 (compared to $9,400 for recent graduates in other professions), teachers, unlike other workers, generally have 9-10 month contracts.

Despite an overall national surplus of beginning (newly qualified) teachers, some local shortages of teachers have been reported by school districts (entry 4.4). In fall 1977, a total of about 9,200 position openings existed for which teachers were sought but were unable to be hired because qualified candidates were unavailable. School districts reported shortages of about 3,300 special education teachers, including about 1,500 teachers of the learning disabled, 500 teachers of the mentally retarded, and 600 of the speech impaired. About 1,200 positions were reported available for teachers of mathematics and of bilingual education, and about 400 positions for teachers of the natural and physical sciences.

The outlook for teachers has been assessed two ways. First, in response to a request to list the instructional fields for which demand for personnel is likely to emerge or grow within the next 5 years, school districts reported a number of fields where the availability of positions may increase (entry 4.5). Teaching learning disabled pupils was cited most frequently (1,200 districts), followed by teaching the gifted and talented and teaching of mathematics (900 to 1,000 school districts); other special education, agriculture, natural and physical sciences, and industrial arts (600 to 800 districts); and vocational, bilingual, and health and physical education (500 to 600 districts).

Second, past patterns of teacher supply and demand suggest that changes in demand for teachers are closely related to changes in enrollments (entry 4.6). Changes in the supply of teachers then respond to changes in demand, although such changes in supply frequently lag behind the changes in demand by a few years. For example, when demand for teachers dropped sharply in 1970, the supply of newly qualified teachers graduating from colleges and universities continued to increase for several years, resulting in a surplus. The surplus of new teachers is projected to continue for at least the next 2 or 3 years.

Elementary and secondary school enrollments will continue to decline through 1983. They are then projected to begin to increase in 1984 and continue at least through 1986. As a result, demand is projected to increase in the 1980's, barring major changes in the rate at which teachers leave the profession and changes in pupil-teacher ratios. If the supply of newly qualified teachers continues to decrease as it has during the last few years, a shortage of newly qualified teachers may arise in the mid-1980's. If this occurs, a reserve pool currently estimated to be 150,000 to 200,000 qualified teachers seeking positions will be available to fill many of the openings for at least several years after the onset of a shortage. On the other hand, if the supply of teachers begins to increase or remains the same at about the same time or shortly after demand starts to increase, there will be a continued surplus of newly qualified teachers.

Demand for teachers is affected by the rate at which teachers leave the profession (turnover rate) and by pupil-teacher ratios. If the turnover rate should increase to 8 percent, as opposed to the 6 percent rate that was estimated in a 1974 study, demand will be commensurately higher. Similarly, projected teacher demand is based on expected changes in the pupil-teacher ratio (entry 4.7), which is expected to decline moderately. In comparison with England and Wales and with Germany (F.R.), the pupil-teacher ratio in the United States in primary or elementary schools is lowest; in secondary schools it is only slightly above that of England and Wales and considerably lower than that of Germany (F.R.).

Membership in teachers' organizations has grown substantially since 1964 (entry 4.8). Membership in the American Federation of Teachers has grown from 100,000 in 1964 to 446,045 in 1976. The National Education Association has also experienced rapid growth, resulting in a membership of 1,886,532 in 1976. The combined membership of teachers' organizations is greater than that of the teamsters' or auto workers' unions.

Teachers have been involved in a substantial number of work stoppages in recent years (entry 4.9). While only 9 work stoppages involving teachers were reported in 1964, in 1976 the number reported was 138, down from the 218 reported in 1975. The number of workers involved in these work stoppages also increased sharply, from 14,400 in 1964 to 65,100 in 1976, though a larger number—182,300—were involved in 1975. The man-days idle for teachers increased from 30,600 in 1964 to 713,500 in 1976, corresponding to the increases in the other work stoppage statistics.

Higher Education Faculty

The number of faculty in institutions of higher education has grown substantially since the middle 1960's, paralleling the large increases in enrollments (entry 4.10). Between 1966 and 1976, total enrollment in all institutions of higher education increased about 72 percent while the total number of instructional staff increased about 78 percent. Among faculty holding the rank of instructor or above, those in full-time positions increased by 56 percent and those in part-time positions by almost 137 percent. In 1966, about 23 percent of faculty members with the rank of instructor or above were part-time, but in 1976, over 31 percent were part-time. Among junior instructional staff (teaching and research assistants, assistant instructors, and others) the increase amounted to about 93 percent between 1966 and 1976, with those having full-time positions increasing by 75 percent and those in part-time positions by 97 percent. In the future the number of full-time instructional staff with the rank of instructor or above is projected to increase until 1981 and then decrease slowly, while the number of such part-time faculty is not expected to reach a peak until the mid-1980's. In contrast, the number of junior instructors is projected to reach a peak in 1977 and decline at least until 1986.

The demand for additional faculty members can be analyzed in a way similar to that used in examining the employment prospects of elementary and secondary teachers (entry 4.11). Additional staff members are needed either for replacement or for increased enrollment and improvements in the student-staff ratio. Between 1972 and 1976, total annual demand for additional full-time-equivalent instructional staff increased from a low of about 18,000 in 1972 to a high of about 81,000 in 1975, dropping off to 36,000 in 1976. During this 5-year period, about 47 percent of the demand for additional staff was needed for replacement (estimated with a 4½ percent replacement rate), and about 53 percent was due to changes in enrollment and the student-staff ratio. In the future total annual demand for additional staff is projected to decrease from the level of 1976, largely due to decreases in the number of additional staff needed because of changes in enrollment, which is projected to increase only moderately. Between 1977 and 1981, about 77 percent of the additional staff needed are projected to be for purposes of replacement and only 23 percent for changes in enrollment and the student-staff ratio. After 1982, no additional staff are expected to be needed for increased enrollment or changes in the student-staff ratio, at least through 1986.

One of the factors that affects demand for additional faculty is the proportion of faculty with tenure (entry 4.12). In public institutions of higher education 58.4 percent of the faculty had tenure in 1976–77, while in private institutions 50.9 percent had. The proportions of the faculty having tenure also vary across levels of institutions and between males and females. The highest proportions have tenure at universities, the lowest at 2-year colleges. Proportionally more male than female faculty members have tenure in institutions at all levels, with the differences in rates being greatest at universities and least at 2-year colleges.

Faculty salaries, which have not kept up with increases in the cost of living in the last few years (as chapter 5 will show), also vary by sex and by level of institution as well as by rank (entry 4.13). Male professors at universities are the highest paid, with an average salary in 1976–77 of $26,049 for a 9–10 month contract; female lecturers at 2-year institutions earn the least, $11,003. Salaries for males and females at all ranks are highest at universities. Salaries are higher at other 4-year institutions than at 2-year institutions at the ranks of professor and lecturer, but higher at 2-year institutions for the ranks of associate and assistant professor and instructor.

Average salaries of administrators in institutions of higher education are higher in public than in private institutions and they are higher, in general, for males than for females (entry 4.14). Male presidents and chancellors in public institutions, for example, receive $36,959 compared to the $32,907 earned by males of similar rank in private institutions. Female presidents and chancellors in public institutions, in contrast, receive $35,977 on average and females in similar positions in private institutions earned $31,019. Compared to males, females do relatively better at public than at private institutions in most positions. For example, female deans in arts and sciences earn about 87.8 percent as much as males do in similar positions in public institutions, but they earn only about 78.8 percent of what males earn in private institutions. Females are also more likely to earn salaries comparable to those received by males in the higher positions. In public institutions, for example, in the positions of president or chancellor, females' salaries average 97.3 percent of males', but as registrars, females average only about 73.1 percent of the males' level. A similar pattern is found in private institutions.

An issue of widespread concern is the racial/ethnic and sex composition of the faculty of institutions of higher education (entry 4.15). Among all faculty over 75 percent are males and about 92 percent are non-Hispanic whites. Blacks make up about 4.4 percent of the total faculty and Hispanics about 1.4 percent. The racial/ethnic and sex composition of the faculty varies across ranks. Females constitute only 9.6 percent of the highest rank, professor, but 16.9 percent of the associate professor and 28.2 percent of assistant professor ranks. In the racial classification, 94.9 percent of all professors are white and 2.2 percent are black, while the proportions are 93.4 percent white and 2.0 percent black among associate professors, and 91.2 percent white and 4.8 percent black among assistant professors.

Since 1964, there has been a continuing increase in faculty unionism in the Nation's colleges and universities (entry 4.16). In 1964 very few colleges and universities (less than 0.5 percent) had unionized faculty. By 1976 about 11.7 percent of all colleges and universities had organized faculty, a substantial increase. A recent report from the Academic Collective Bargaining Information Service indicated that in the public sector, the faculties of more 2-year than 4-year institutions are unionized, but the reverse is true for private institutions. The largest number of institutions have faculty represented by the National Education Association as bargaining agent, followed by the American Federation of Teachers. Among the faculty of 4-year institutions, the American Association of University Professors represents the largest number.

Table 4.1
Full-time-equivalent personnel in public elementary and secondary schools and in colleges and universities, by type of position: 1976

Item	Total		Administrative staff		Professional education staff		Other professional staff		Nonprofessional staff	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Public elementary and secondary schools	**3,884,000**	100.0	**168,000**	4.3	**2,341,000**	60.3	**59,000**	1.5	**1,316,000**	33.9

	Total		Administrative staff[1]		Instructional and research staff[2]		Specialist support staff		Nonprofessional staff	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Colleges and universities	**1,541,338**	100.0	**98,972**	6.4	**583,216**	37.8	**163,267**	10.6	**695,883**	45.1

[1] Includes executive, administrative and managerial staff.
[2] Includes instruction and research assistants.

NOTE: Details may not add to total because of rounding.
SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished tabulations.

Chart 4.1
Full-Time-Equivalent Personnel in Public Elementary and Secondary Schools and in Colleges and Universities

Personnel responsible for duties other than instruction or research constitute about 40 percent of the staff of public elementary and secondary schools and about 65 percent of the staff of colleges and universities.

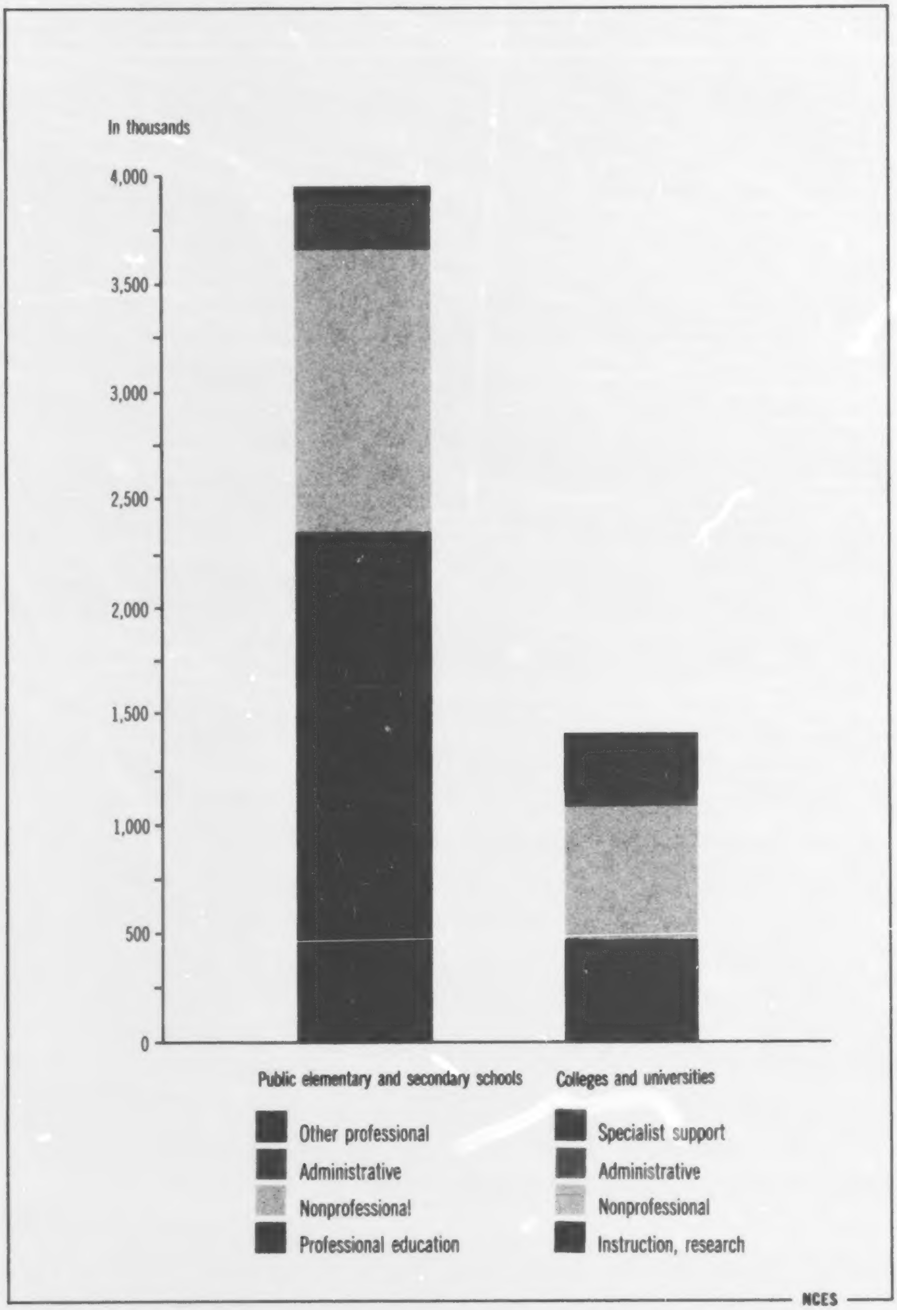


Table 4.2
Teaching status of recipients of bachelor's and master's degrees in 1974–75: Spring 1976

Teaching status	Total	Degree	
		Bachelor's	Master's
	(Numbers in thousands)		
Total eligible to teach	261	227	34
Total applied to teach	**201**	**178**	**23**
Percent of total eligible	77	78	68
Teaching full time	**109**	**93**	**16**
Percent of total applied	54	53	67
Teaching part time	**20**	**19**	**1**
Percent of total applied	10	11	4
Not teaching	**72**	**65**	**7**
Percent of total applied	36	37	28

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Recent College Graduates, unpublished tabulations.

Chart 4.2
Status of Recent College Graduates Newly Qualified to Teach Who Applied for Teaching Positions

About 54 percent of recent college graduates who applied to teach were hired in full-time teaching positions.

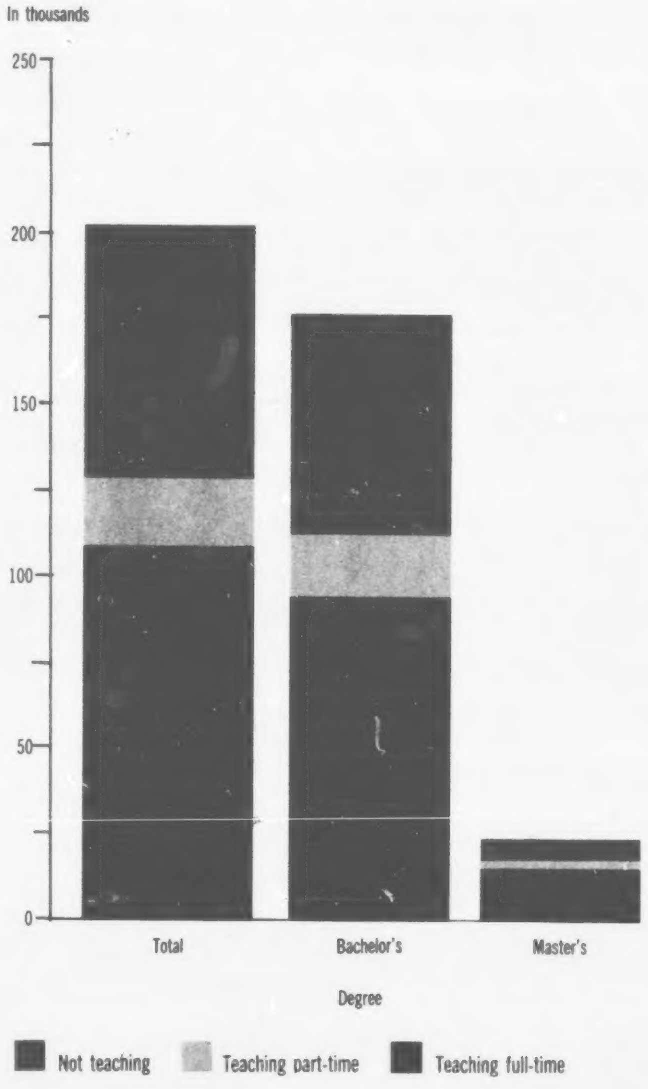


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Table 4.3

Bachelor's degree recipients in 1974–75 eligible to teach who applied for a teaching job, and number teaching full-time, by level and field: Spring 1976

Level and field	Number who applied for a teaching job	Number teaching full-time	Percent teaching full-time
Total	177,700	93,400	53
Level:			
Elementary	69,700	40,800	59
Secondary	59,800	28,000	47
Elementary/secondary	37,600	20,400	55
Other or not specified	10,600	4,200	37
Selected fields:*			
General elementary	47,900	27,800	58
Art	5,900	1,900	32
English	6,500	3,000	46
Mathematics	4,900	2,400	50
Music	7,200	4,200	59
Physical education	7,000	4,400	62
Social science	10,000	3,600	36
Vocational education	9,000	5,700	64
Special education	16,400	11,500	70

*Does not include data on persons reporting eligibility in more than one field and on fields having a response too small to report national estimates.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Recent College Graduates, unpublished tabulations.

Chart 4.3
Full-Time Teaching Status of Recent Recipients of Bachelor's Degrees Who Applied For Teaching Positions, by Level and Field

The success of recent bachelor's degree recipients in getting full-time teaching positions varied by instructional field. About 75 percent of those applying in special education got full-time positions, compared with only 36 percent of those applying in social science.

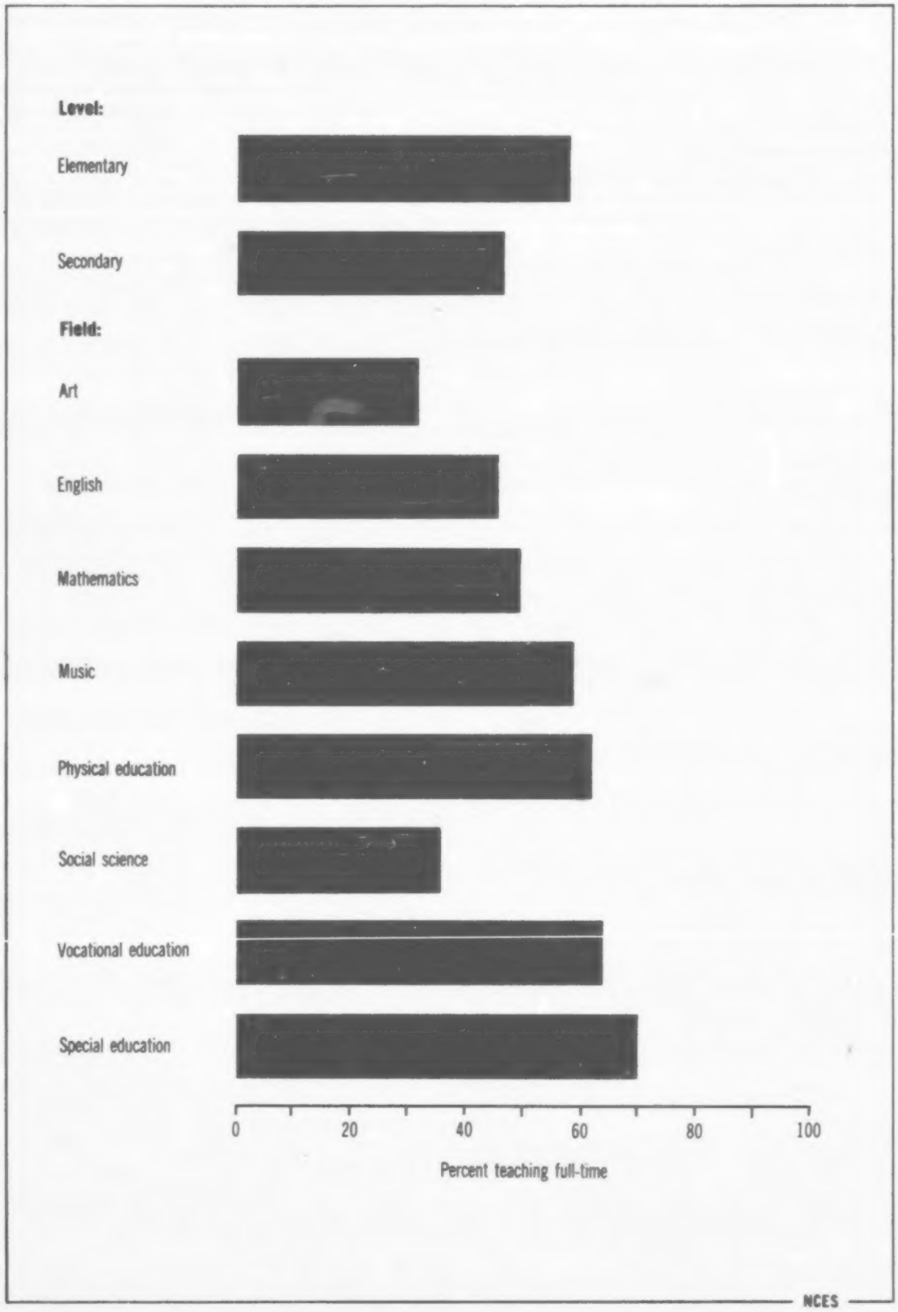


Table 4.4
Estimated [1] unfilled teacher positions[2]: Fall 1977

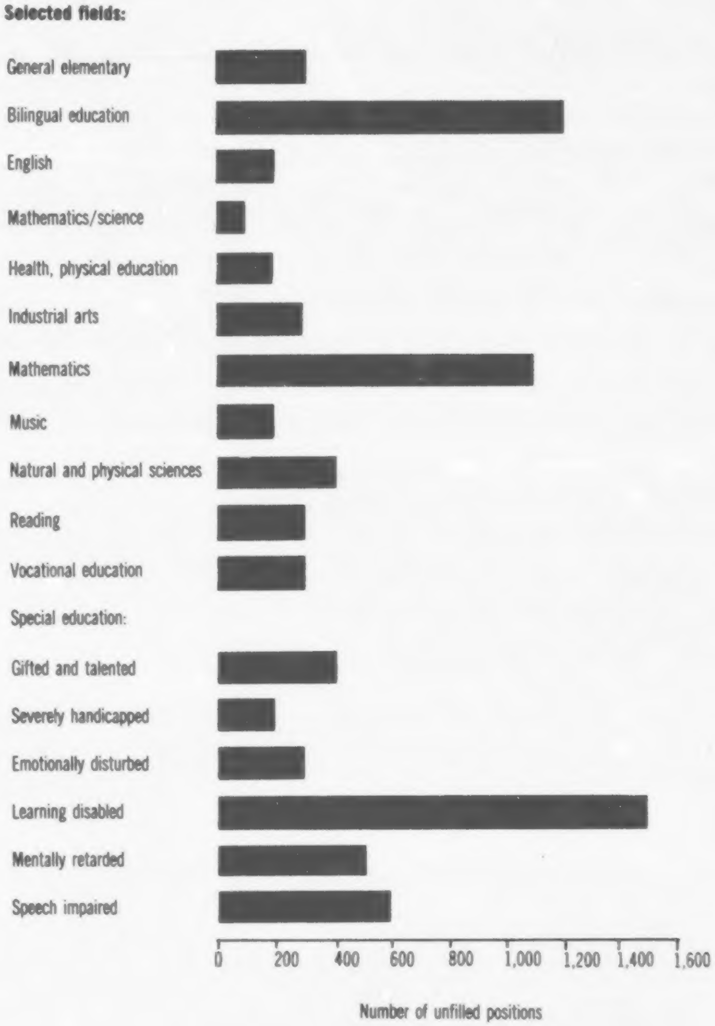
Level and field	Unfilled teacher positions
All districts	9,200
Level:	
Elementary	3,700
Secondary	4,500
Elementary and secondary	1,000
Selected fields:	
General elementary	300
Art	(3)
Bilingual education	1,200
Business	(3)
English language arts	200
Foreign languages	(3)
Health, physical education	200
Home economics (nonoccupational)	(3)
Industrial arts	300
Mathematics	1,100
Music	200
Natural and physical sciences	400
Reading	300
Social studies	(3)
Vocational education	300
Mathematics/science	100
English/social studies	(3)
Special education:	
Gifted and talented	400
Severely handicapped	200
Moderately and mildly handicapped:	
Emotionally disturbed	300
Learning disabled	1,500
Mentally retarded	500
Speech impaired	600
Other	300

[1] National estimates based on a sample of 507 of the 15,344 school districts.
[2] Position openings for which teachers were sought but were unable to be hired because qualified candidates were unavailable.
[3] Estimated number greater than zero but less than 50.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, LEA Survey of Teacher and Administrator Shortages, unpublished tabulations.

Chart 4.4
School District Teacher Shortages*

Despite an overall surplus of teachers, school districts reported over 1,000 position openings for which qualified teachers were sought but were unavailable in the fields of teaching the learning disabled, bilingual education, and mathematics.



*Position openings for which teachers were sought but were unable to be hired because qualified candidates were unavailable.

Table 4.5
Fields for which school districts report demand for teachers will increase in the next 5 years: Fall 1977

Field	Number of districts[1]
Art	**500**
Bilingual education	**500**
Business	(2)
English language arts	400
Foreign languages	(2)
Health, physical education	**500**
Home economics (nonoccupational)	200
Industrial arts	**800**
Mathematics	**900**
Music	200
Natural and physical sciences	**700**
Reading	400
Vocational education, not specified	**500**
Agriculture	**600**
Distributive education	(2)
Health occupations	(2)
Occupational home economics	(2)
Office occupations	(2)
Technical education	200
Trade and industry	100
Special education, not specified	**600**
Severely handicapped	300
Emotionally disturbed	300
Learning disabled	**1,200**
Mentally retarded	200
Speech impaired	200
Gifted and talented	**1,000**
Other special education	500
Others	300

[1] National estimates based on a sample of 507 of the 15,344 school districts.
[2] Estimated number greater than zero but less than 50.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, LEA Survey of Teacher and Administrator Shortages, unpublished tabulations.

Chart 4.5
Fields in Which Demand for Teachers is Expected to Increase in Next 5 Years

School districts have indicated that demand for teachers is most likely to emerge or grow in the next 5 years in the fields of teaching the learning disabled, gifted and talented, mathematics, and industrial arts.

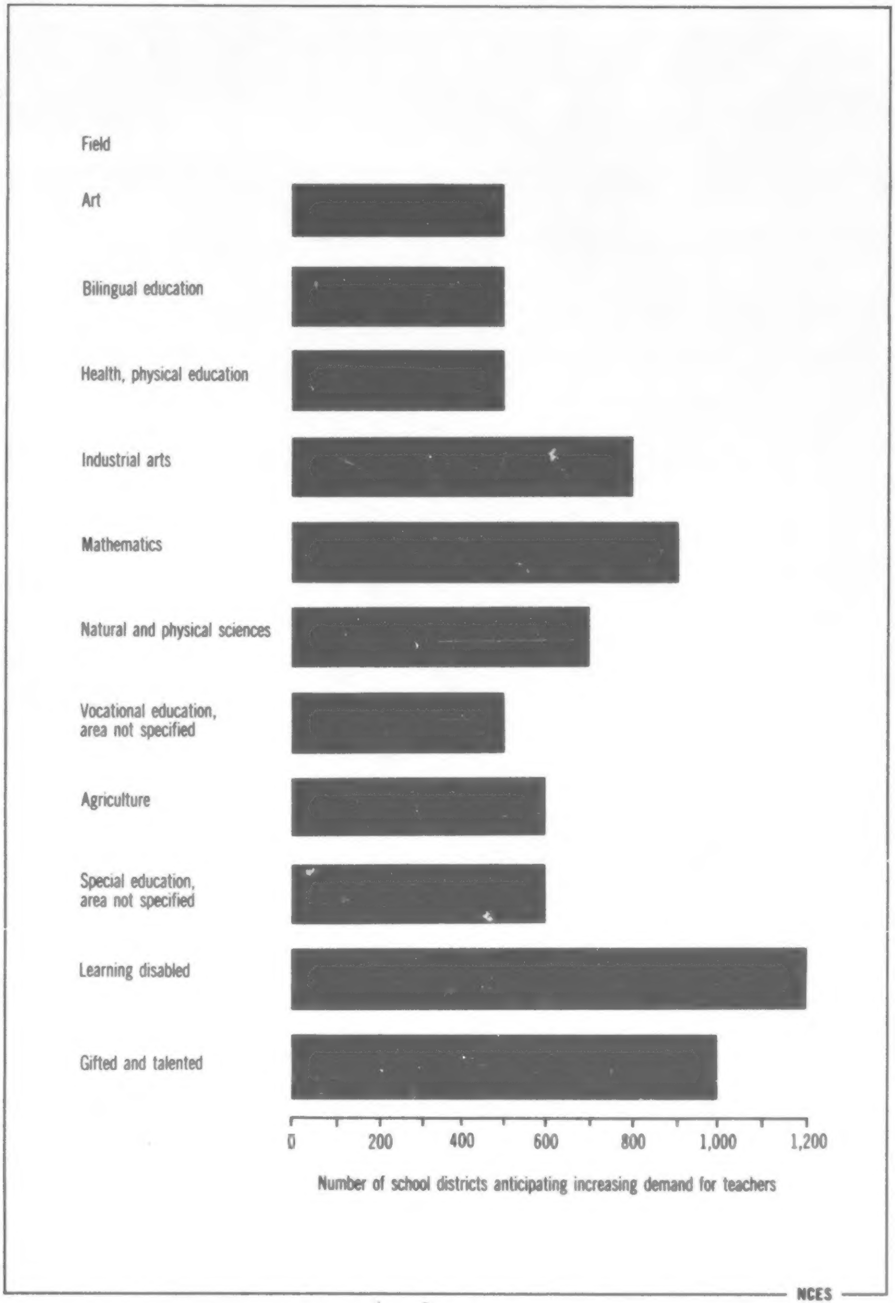


Table 4.6
Supply and demand of teachers, by status: 1961 to 1986

Year	Supply		Demand	
	Newly qualified teachers	Newly qualified teachers who applied for job	Total additional teachers	Newly qualified teachers
		(In thousands)		
1961	129	97	183	137
1962	142	107	193	145
1963	154	116	208	156
1964	174	131	213	160
1965	190	143	209	157
1966	199	149	228	171
1967	220	165	223	167
1968	233	175	243	182
1969	264	198	250	187
1970	284	213	221	164
1971	314	239	184	132
1972	317	244	182	127
1973	322	251	178	125
1974	305	241	170	119
1975	259	207	181	118
1976	227	182	146	102
		Projected (based on 6 percent turnover rate)		
1977	—	—	134	94
1978	—	—	128	90
1979	—	—	121	85
1980	—	—	117	82
1981	—	—	129	90
1982	—	—	135	95
1983	—	—	145	102
1984	—	—	167	117
1985	—	—	181	127
1986	—	—	188	132
		Projected (based on 8 percent turnover rate)		
1982	—	—	177	124
1983	—	—	186	130
1984	—	—	208	146
1985	—	—	223	156
1986	—	—	231	162

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished data.

Chart 4.6
Supply and Demand of Newly Qualified Elementary and Secondary School Teachers

The supply of newly qualified teachers exceeded demand by about 80,000 in 1976.

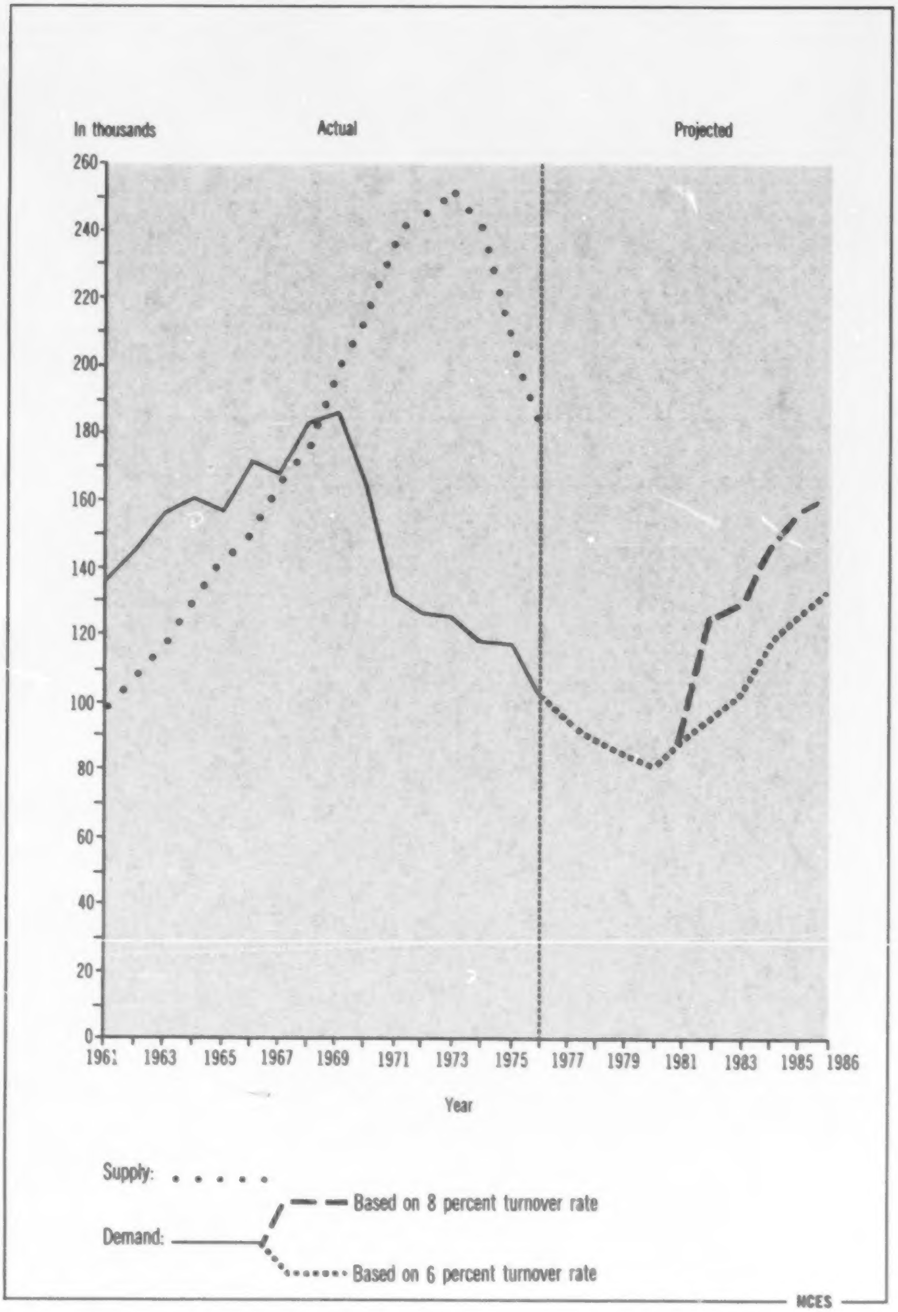


Table 4.7
Pupil-teacher ratios in public elementary and secondary schools in selected countries: Selected years, 1971 to 1986

Country and level	School year ending						
	Actual					Projected	
	1971	1972	1973	1974	1975	1981	1986
United States	22.1	22.1	21.6	21.1	20.7	19.4	18.5
Elementary	**24.4**	**24.9**	**24.0**	**22.9**	**22.6**	**20.7**	**19.0**
Secondary	**19.8**	**19.3**	**19.1**	**19.3**	**18.7**	**18.1**	**17.6**
Germany (F.R.)[1]	28.4	21.3	26.6	26.3	25.9	21.0	18.5
Elementary	**36.8**	**35.7**	**34.2**	**33.1**	**31.0**	**23.5**	**21.0**
Secondary	**25.9**	**24.8**	**24.5**	**24.6**	**25.0**	**21.5**	**18.5**
England and Wales[2]	22.6	22.0	21.3	21.1	20.6	20.3	17.7
Elementary	**27.0**	**26.0**	**25.5**	**24.8**	**23.9**	**23.8**	**19.7**
Secondary	**18.0**	**17.6**	**17.1**	**17.5**	**17.2**	**17.0**	**15.5**

[1] Includes special schools for the handicapped and part-time secondary level trade schools.
[2] Includes nursery schools and teacher training institutions.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished data.

Chart 4.7
Pupil-Teacher Ratios in Public Elementary and Secondary Schools

The pupil-teacher ratio in the United States is lower than in Germany (F.R.) or England and Wales in elementary schools, but higher than in England and Wales in secondary schools.

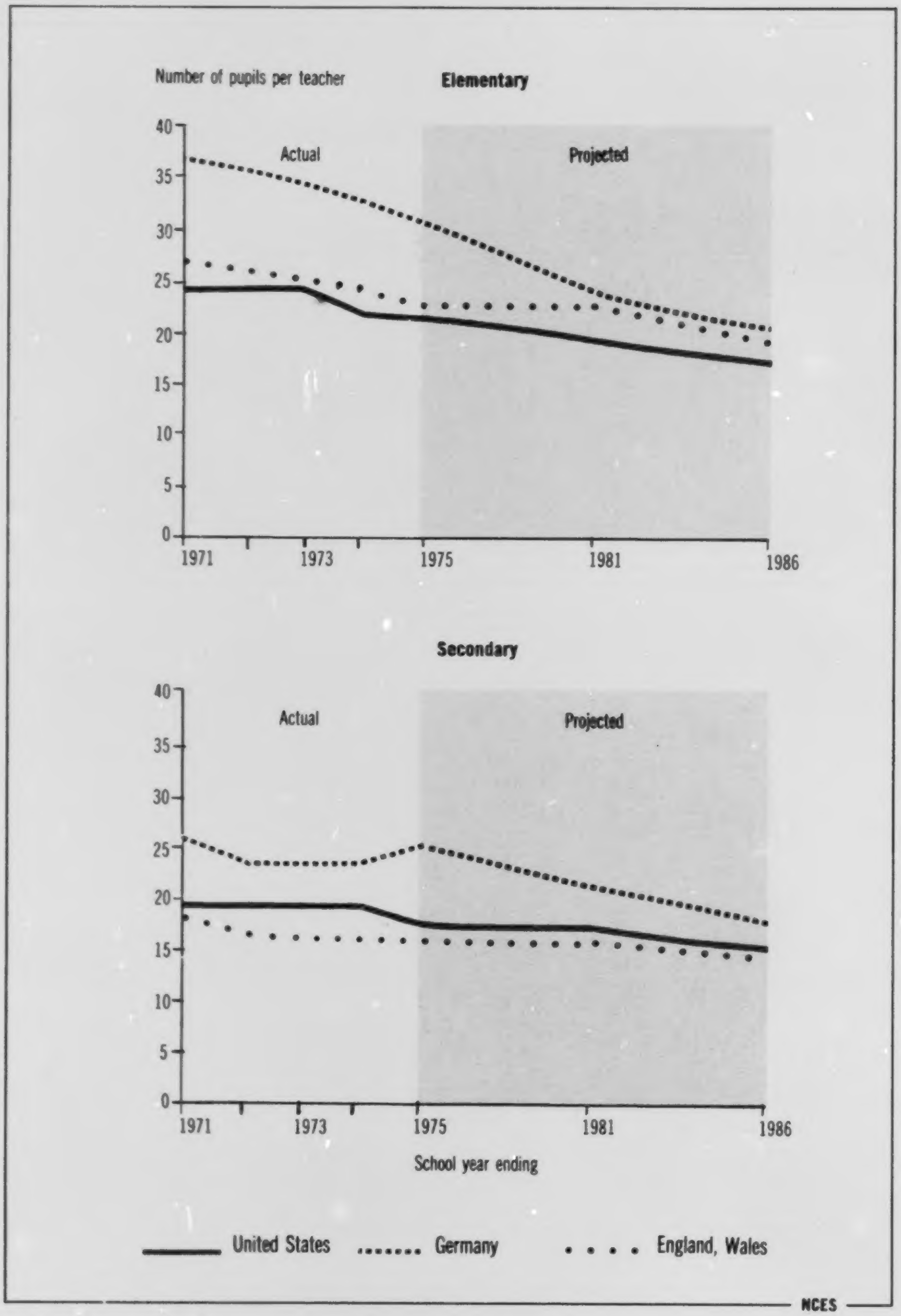


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Table 4.8
Membership in selected employee organizations: 1964, 1972, 1974 and 1976

Employee organization	Membership 1964	 1972	 1974	 1976
Teamsters	1,506,769	**1,854,659**	**1,973,272**	**1,888,395**
National Education Association [1]	903,384	**1,166,203**	**1,467,186**	**1,886,532**
Auto workers	1,168,067	**1,393,501**	**1,544,859**	**1,358,354**
Steel workers	965,000	1,400,000	1,300,000	1,300,000
Electrical workers (IBEW)	806,000	956,579	991,228	923,560
Machinists	808,065	757,564	943,280	917,266
State, county employees	234,839	**529,035**	**648,160**	**750,000**
Retail clerks	427,555	633,221	650,876	699,200
Laborers	432,073	600,000	650,000	627,406
Service employees	320,000	484,000	550,000	575,000
Meat cutters	341,366	528,631	525,000	509,903
Communication workers	293,000	443,278	498,743	483,238
American Federation of Teachers (AFT)	100,000	**248,521**	**444,000**	**446,045**
Operating engineers	310,942	401,537	415,395	420,000
Government employees (AFGE)	138,642	292,809	300,000	260,000

[1] NEA data represent membership between September of preceding year and August of year indicated.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, News Release, August 12, 1975, and unpublished data; National Education Association, *NEA Handbook*.

Chart 4.8
Membership in Teachers' and Selected Other Employee Organizations

Combined teacher membership in the NEA and the AFT is greater than membership in the teamsters' or auto workers' unions.

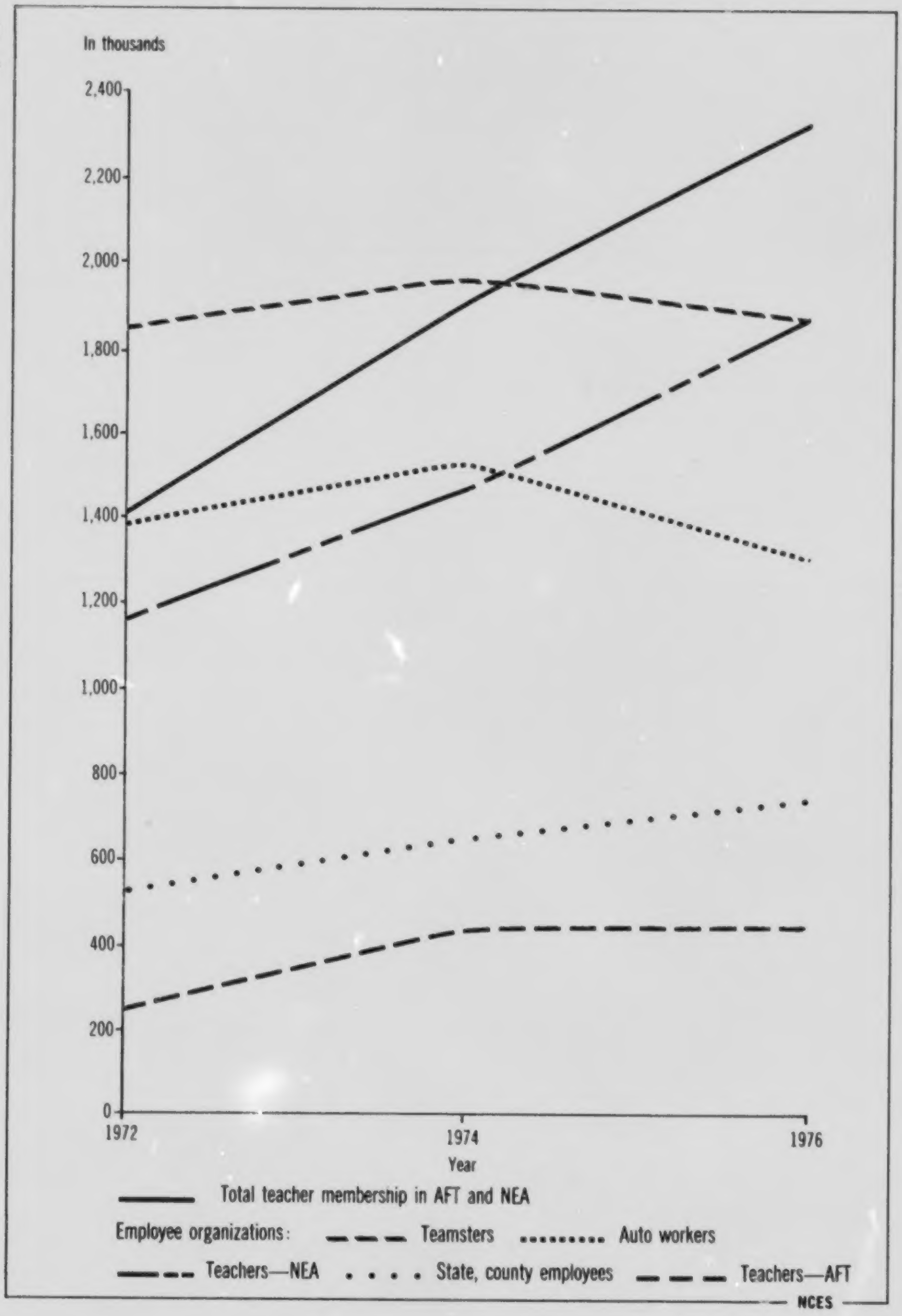


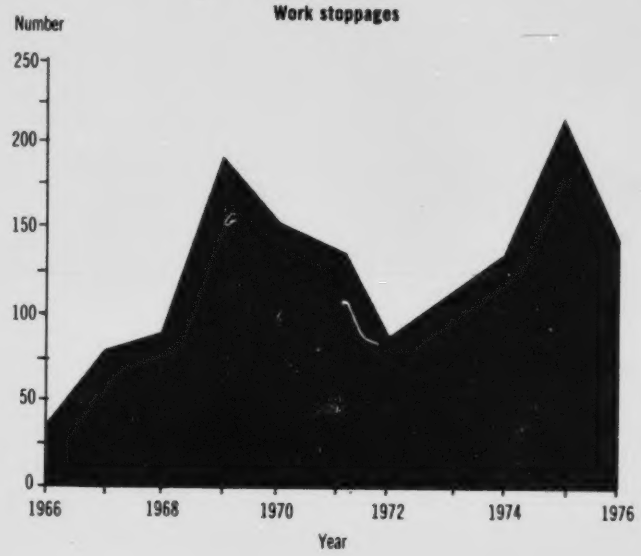
Table 4.9
Work stoppages by teachers: 1959 to 1976

Year	Number of stoppages	Teachers involved	Man-days idle during year
1959	2	210	670
1960	3	5,490	5,490
1961	1	20	20
1962	1	20,000	20,000
1963	2	2,200	2,590
1964	9	14,400	30,600
1965	5	1,720	7,880
1966	30	37,300	58,500
1967	76	92,400	969,300
1968	88	145,000	2,180,000
1969	183	105,000	412,000
1970	152	94,800	935,600
1971	135	64,600	713,000
1972	87	33,900	207,300
1973	117	51,400	620,700
1974	133	60,100	538,100
1975	218	182,300	1,419,800
1976	138	65,100	713,500

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Work Stoppages in Government, 1958–68*, Report 348, 1970; *Work Stoppages in Government, 1973*, Report 437, 1975; *Government Work Stoppages*, 1960, 1969, and 1970, 1971; and unpublished tabulations.

Chart 4.9
Teacher Work Stoppages

The number of teachers involved in work stoppages reached a high of 182,000 in 1975.



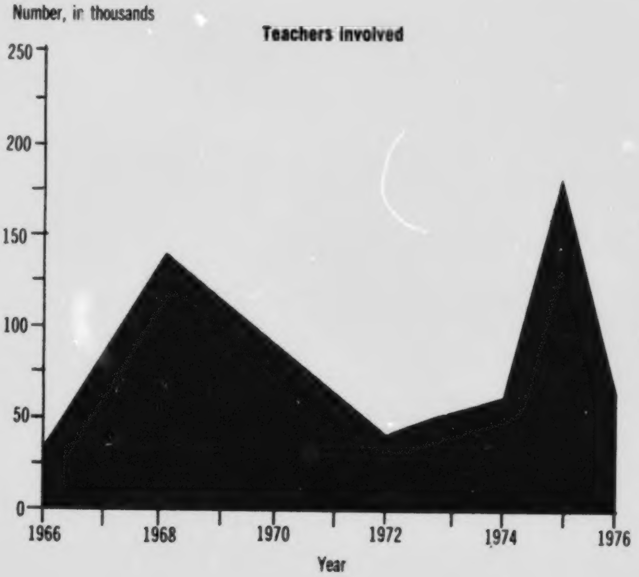


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Table 4.10

Estimated full-time and part-time instructional staff for resident courses in institutions of higher education, by professional rank: Fall 1966 to 1986

Fall of year	Total	Instructor or above			Junior instructor		
		Total	Full-time	Part-time	Total	Full-time	Part-time
				(In thousands)			
1966	445	362	278	84	83	16	67
1967	484	390	299	91	94	13	81
1968	523	428	332	96	95	15	80
1969	546	450	350	100	97	15	82
1970	573	474	369	104	101	14	87
1971	590	492	379	113	97	10	88
1972	590	500	380	120	90	6	84
1973	684	527	389	138	107	13	94
1974	695	567	406	161	128	17	111
1975	781	628	440	188	153	22	131
1976	793	633	434	199	160	28	132
				Projected			
1977	823	657	449	208	166	28	138
1978	830	667	452	215	163	28	135
1979	839	675	457	218	164	29	135
1980	848	683	462	221	165	30	135
1981	855	691	463	228	164	29	135
1982	851	690	462	228	161	29	132
1983	845	684	459	225	161	29	132
1984	840	685	456	229	155	28	127
1985	834	680	451	229	154	27	127
1986	823	673	446	227	150	27	123

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986–87*, forthcoming.

Chart 4.10
Faculty in Institutions of Higher Education

The number of full-time faculty with the rank of instructor or above increased about 18 percent between 1970 and 1976, while the number of part-time faculty increased about 91 percent.

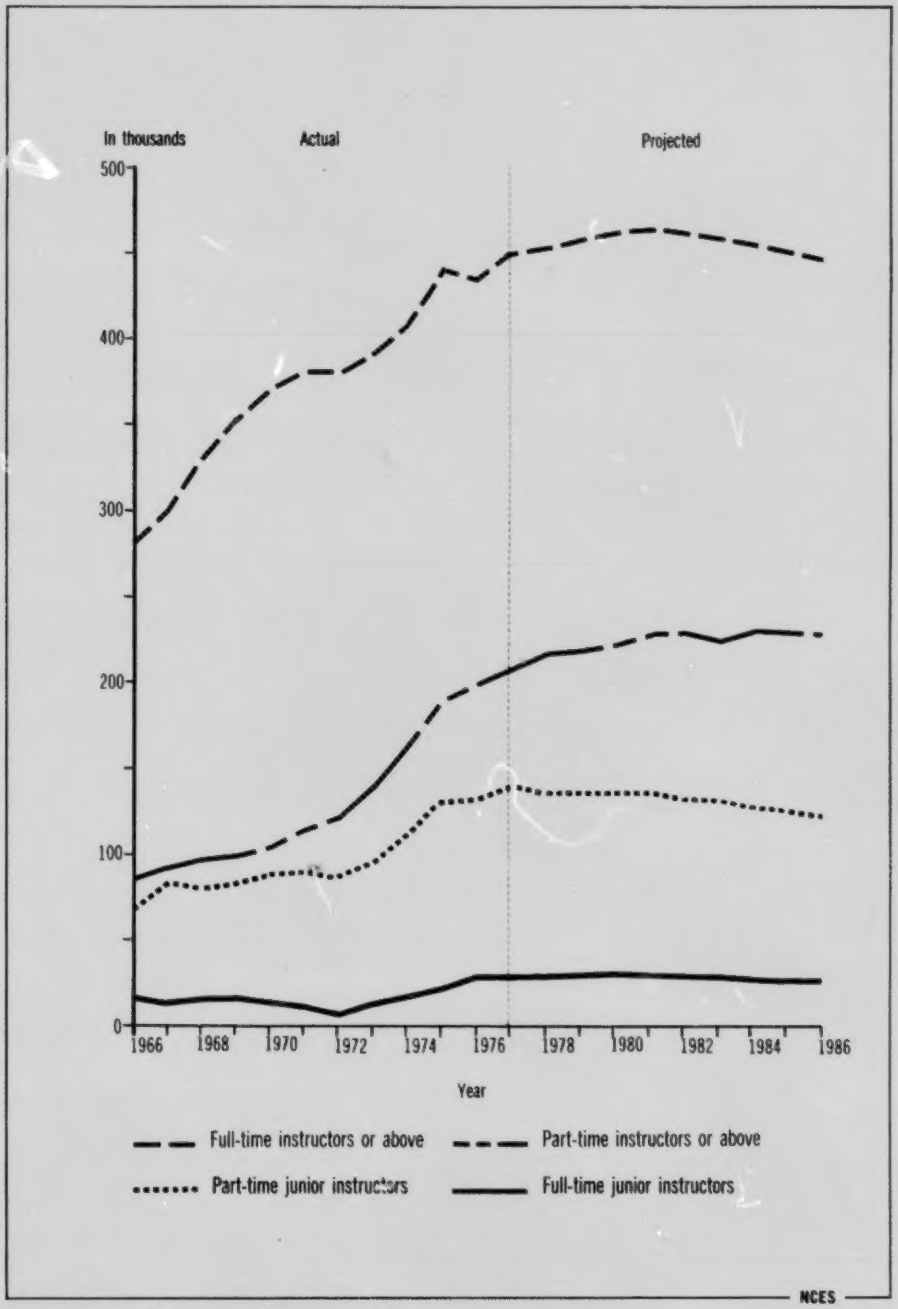

Table 4.11
Estimated demand for full-time-equivalent instructional staff in institutions of higher education: Fall 1970 to 1985

Fall of year	Full-time-equivalent instructional staff	Additional full-time-equivalent instructional staff needed		
		Total	For increased enrollment and student-staff ratio changes	For replacement
		(In thousands)		
1971	458	—	—	—
1972	455	18	−3	21
1973	481	46	26	20
1974	516	57	35	22
1975	574	81	58	23
1976	584	36	10	26
		Projected		
1977	604	46	20	26
1978	608	31	4	27
1979	615	34	7	27
1980	622	35	7	28
1981	624	30	2	28
1982	622	26	−2	28
1983	618	24	−4	28
1984	613	23	−5	28

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986–87*, forthcoming.

Chart 4.11
Demand for Full-Time-Equivalent Instructional Staff in Institutions of Higher Education

Demand for full-time-equivalent instructional staff in institutions of higher education peaked in 1975, when about 81,000 additional staff were needed.

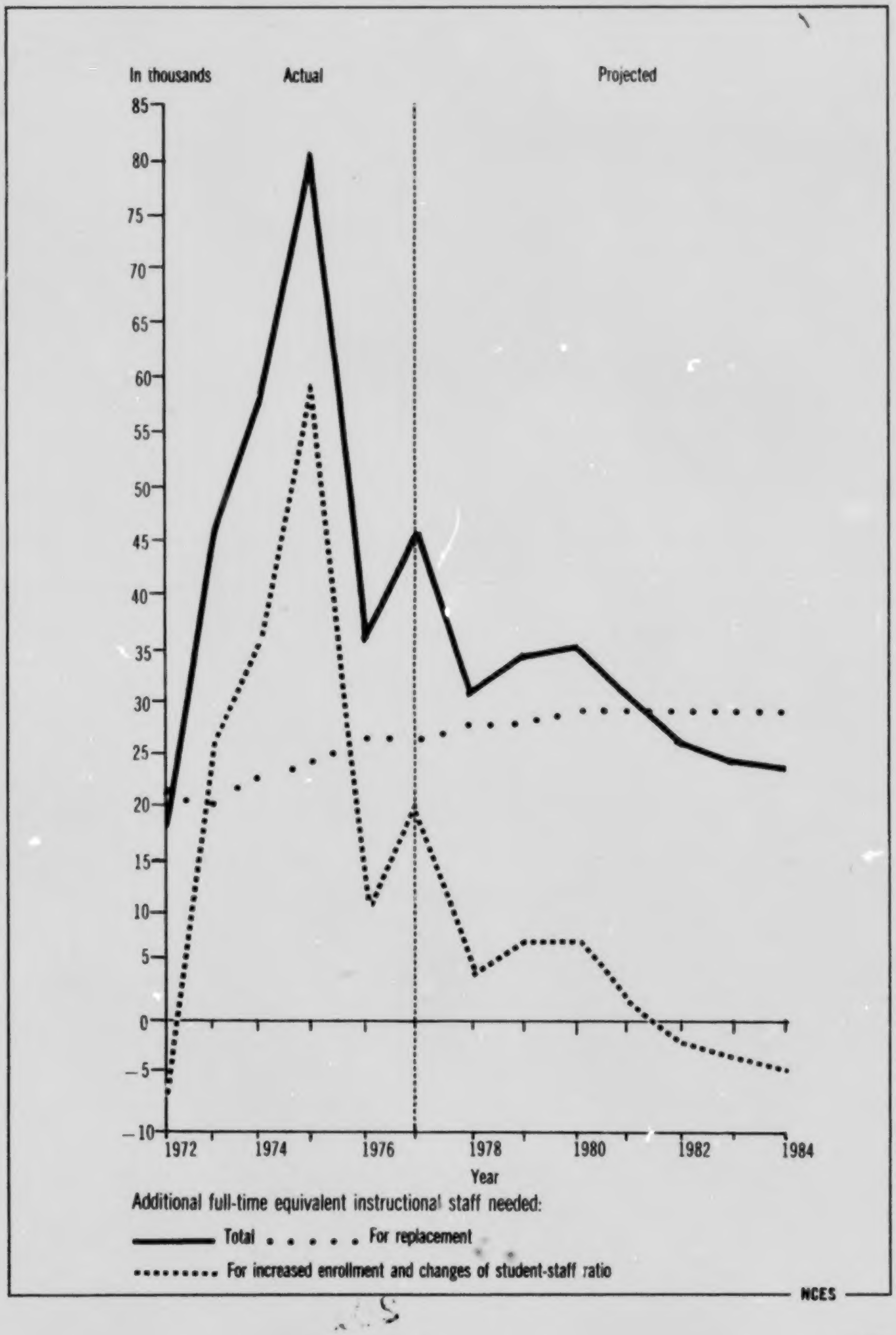

Table 4.12
Faculty in institutions of higher education, by control and type of institution and by tenure status and sex of faculty: 1976–77

Type of institution	Public					Private				
		With tenure					With tenure			
			Percent					Percent		
	Total	Number	Total	Males	Females	Total	Number	Total	Males	Females
All institutions	284,302	166,168	58.4	**63.1**	**44.7**	102,576	52,224	50.9	**56.3**	**33.6**
Professor	62,068	58,067	93.6	93.7	92.3	27,642	25,447	92.1	92.5	88.1
Associate professor	65,574	54,469	83.1	83.4	81.7	25,862	18,840	72.8	73.2	71.2
Assistant professor	73,522	23,919	32.5	30.8	36.5	31,364	6,426	20.5	19.9	21.8
Instructor	26,118	3,135	12.0	12.3	11.7	10.277	322	3.1	3.6	2.6
Lecturer	4,230	207	4.9	5.4	4.2	1,069	28	2.6	3.3	1.6
Universities	89,367	54,603	61.1	**65.8**	**39.4**	31,608	18,457	58.4	**63.7**	**34.1**
Professor	30,468	28,327	93.0	93.1	90.5	11,609	11,146	96.0	96.2	93.3
Associate professor	25,260	20.953	82.9	83.2	81.3	8,073	6,036	74.8	75.1	72.9
Assistant professor	24,753	4,713	19.0	17.0	24.6	9,257	1,209	13.1	12.3	15.0
Instructor	6,240	421	6.7	6.1	7.3	1,894	52	2.7	3.0	2.4
Lecturer	1,982	130	6.6	7.1	5.8	588	11	1.9	1.9	1.9
Other 4-year institutions	113,634	68,531	60.3	**64.8**	**46.7**	66,594	32,633	49.0	**53.8**	**34.9**
Professor	27,947	26,464	94.7	94.8	93.7	15,810	14,155	89.5	89.9	86.9
Associate professor	32,537	27,039	83.1	83.5	81.3	17,410	12,568	72.2	72.5	71.1
Assistant professor	37,295	13,214	35.4	34.1	38.5	21,490	5,061	23.6	23.2	24.4
Instructor	12,686	1,682	13.3	13.0	13.5	7,724	231	3.0	3.3	2.7
Lecturer	1,935	66	3.4	4.0	2.7	465	17	3.7	5.3	1.5
2-year institutions	81,301	43,034	52.9	**56.7**	**45.7**	4,374	1,134	25.9	**30.0**	**20.6**
Professor	3,653	3,276	89.7	89.5	90.4	223	146	65.5	66.9	61.4
Associate professor	7,777	6,477	83.3	83.2	83.5	379	236	62.3	64.7	55.4
Assistant professor	11,474	5,992	52.2	53.5	50.0	617	156	25.3	30.6	19.0
Instructor	7,192	1,032	14.3	16.1	12.4	659	39	5.9	10.1	2.9
Lecturer	313	11	3.5	2.8	4.1	16	...	...	...	...

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Survey of Full-time Instructional Faculty, 1976–77," forthcoming.

Chart 4.12
Tenured Faculty in Institutions of Higher Education

In public institutions of higher education, about 63 percent of the male faculty have tenure compared with about 45 percent of the female. In private institutions, about 56 percent of the male and 34 percent of the female faculty have tenure.

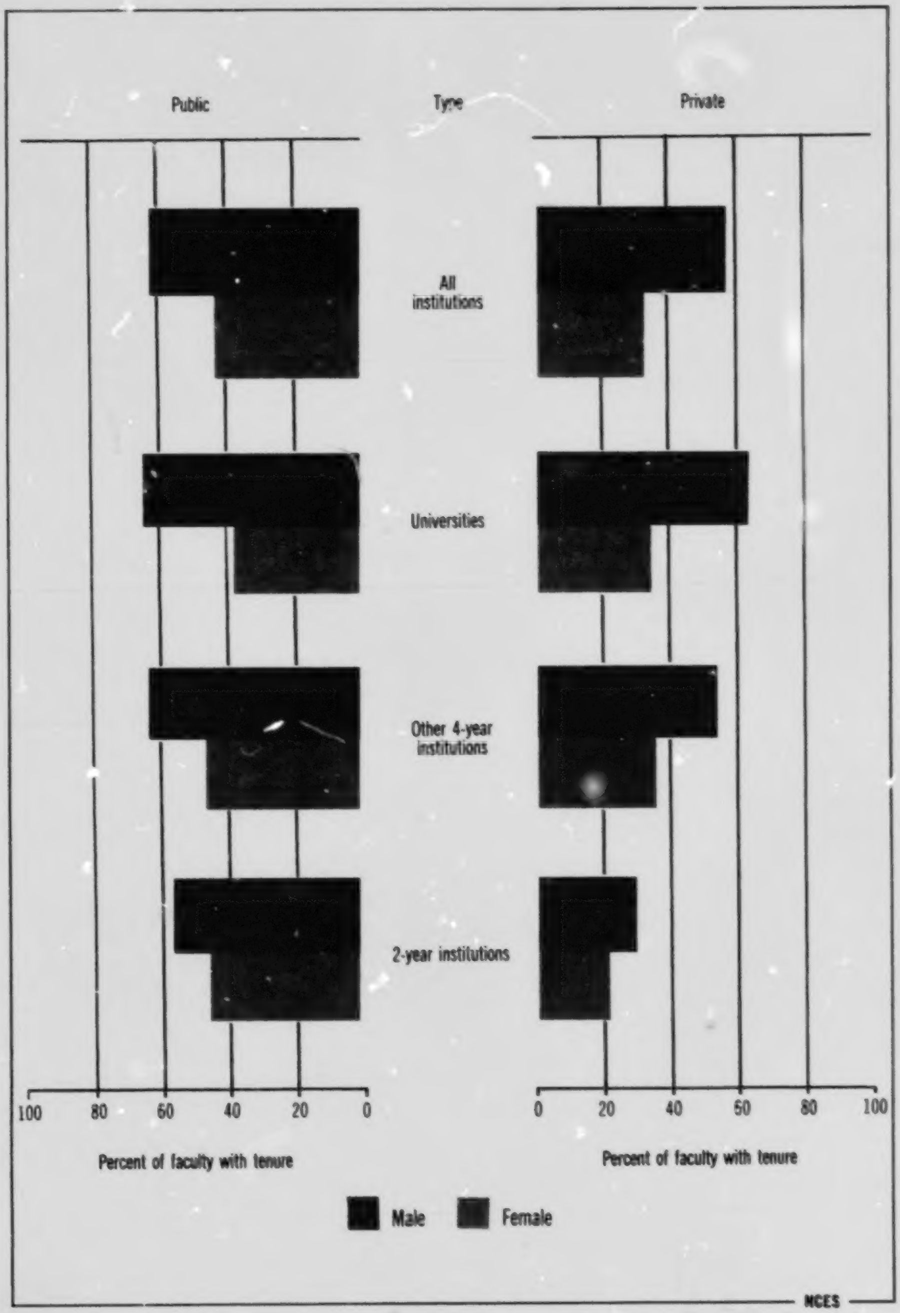

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Table 4.13
Average salaries of full-time instructional faculty in institutions of higher education on 9–10 month contracts, by type of institution and by sex and rank of faculty: 1976

Rank	All institutions		Universities		Other 4-year institutions		2-Year institutions	
	Male	Female	Male	Female	Male	Female	Male	Female
Professor	$24,013	$21,503	$26,049	$23,270	$22,220	$20,815	$21,106	$20,557
Associate professor	18,044	17,138	18,930	17,976	17,445	16,615	18,041	17,647
Assistant professor	14,849	14,207	15,439	14,765	14,477	13,850	14,970	14,552
Instructor	12,077	11,568	12,220	11,776	11,867	11,338	12,444	11,936
Lecturer	14,131	12,385	14,583	12,852	13,653	11,968	12,381	11,003
Undesignated rank	17,235	15,428	15,444	12,187	13,428	11,420	17,473	15,742

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished data.

Chart 4.13

Average Salaries of Full-Time Instructional Faculty in Institutions of Higher Education

Average salaries of female full-time instructional faculty are lower than those of males at all ranks in all types of institutions of higher education.

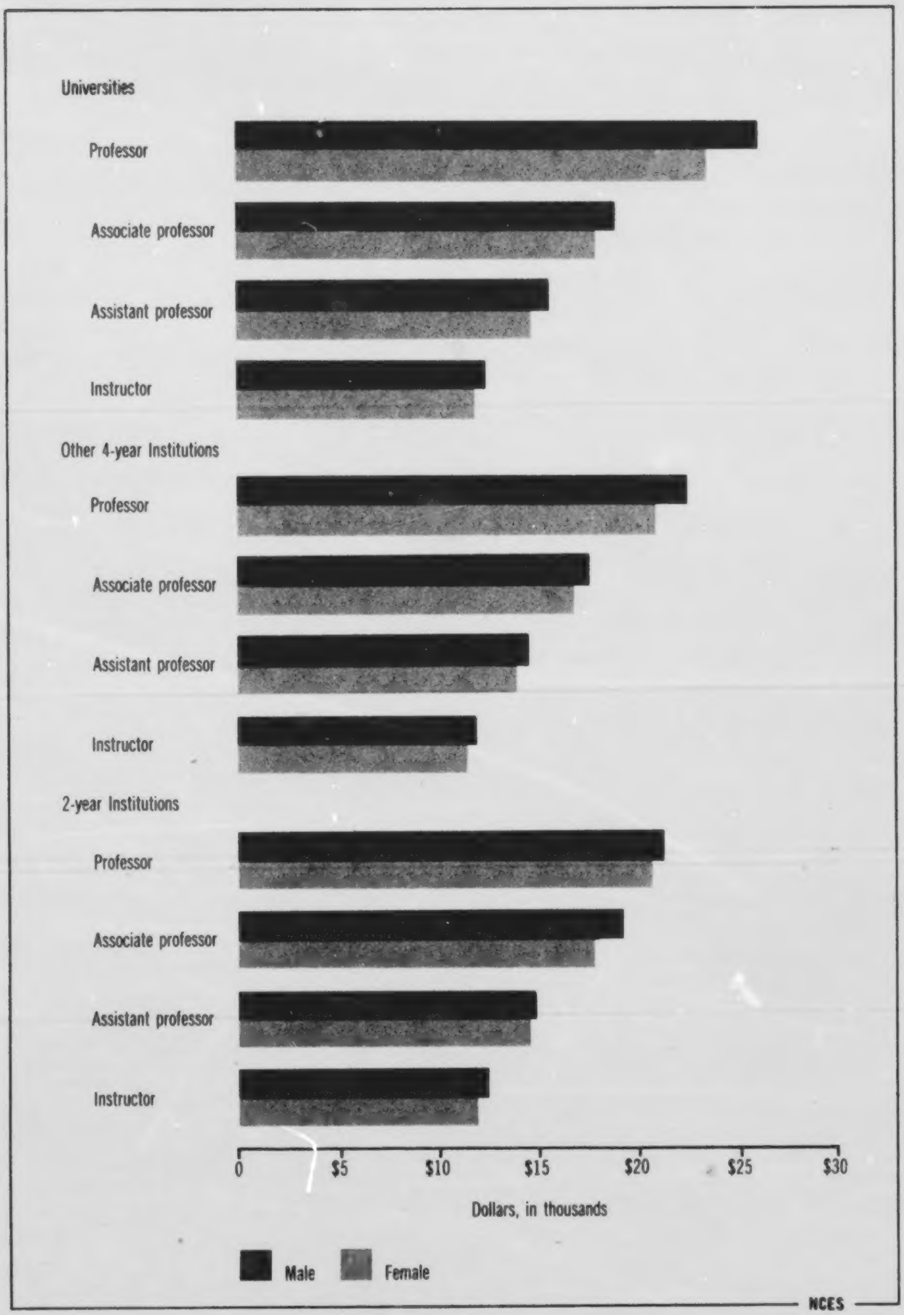


Table 4.14
Average salaries of selected administrators in institutions of higher education, by control of institution and sex of administrator: 1976

Position	Public			Private		
	Male	Female	Female as percent of male	Male	Female	Female as percent of male
President/Chancellor	$36,959	$35,977	97.3	$32,907	$31,019	94.3
Chief academic officer	30,127	30,774	102.1	24,874	21,898	88.0
Chief business officer	27,173	19,510	71.8	23,427	15,185	64.8
Chief librarian	23,684	19,030	80.3	17,753	13,436	75.7
Director, admissions	21,365	18,253	85.4	17,365	14,194	81.7
Director, alumni association	19,990	14,613	73.1	15,702	11,964	76.2
Director, student counseling	21,715	19,016	87.6	16,502	13,340	80.8
Director, student financial aid	18,372	15,116	82.3	14,391	11,278	78.4
Registrar	20,875	15,267	73.1	16,356	12,111	74.0
Dean, arts and sciences[1]	29,990	26,336	87.8	26,448	20,842	78.8
Dean, business[1]	28,878	21,366	74.0	26,526	17,487	65.9
Dean, education[1]	30,698	25,338	82.5	23,486	17,503	74.5
Dean, engineering[1]	35,594	(2)	...	32,793	(2)	...
Dean, evening division[1]	21,769	18,997	87.3	19,555	14,137	72.3
Dean, graduate programs[1]	33,055	28,286	85.6	27,662	22,921	82.9
Dean, vocational education[1]	24,149	23,577	97.6	(3)	(3)	...

[1] May be referred to as "Director."

[2] No cases reported.

[3] Data are excluded to prevent the disclosure of individual salaries.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished tabulations.

Chart 4.14
Average Salaries of Administrators in Institutions of Higher Education

Average salaries of male administrators in institutions of higher education are higher than those of females, except for the position of chief academic officer in public institutions.

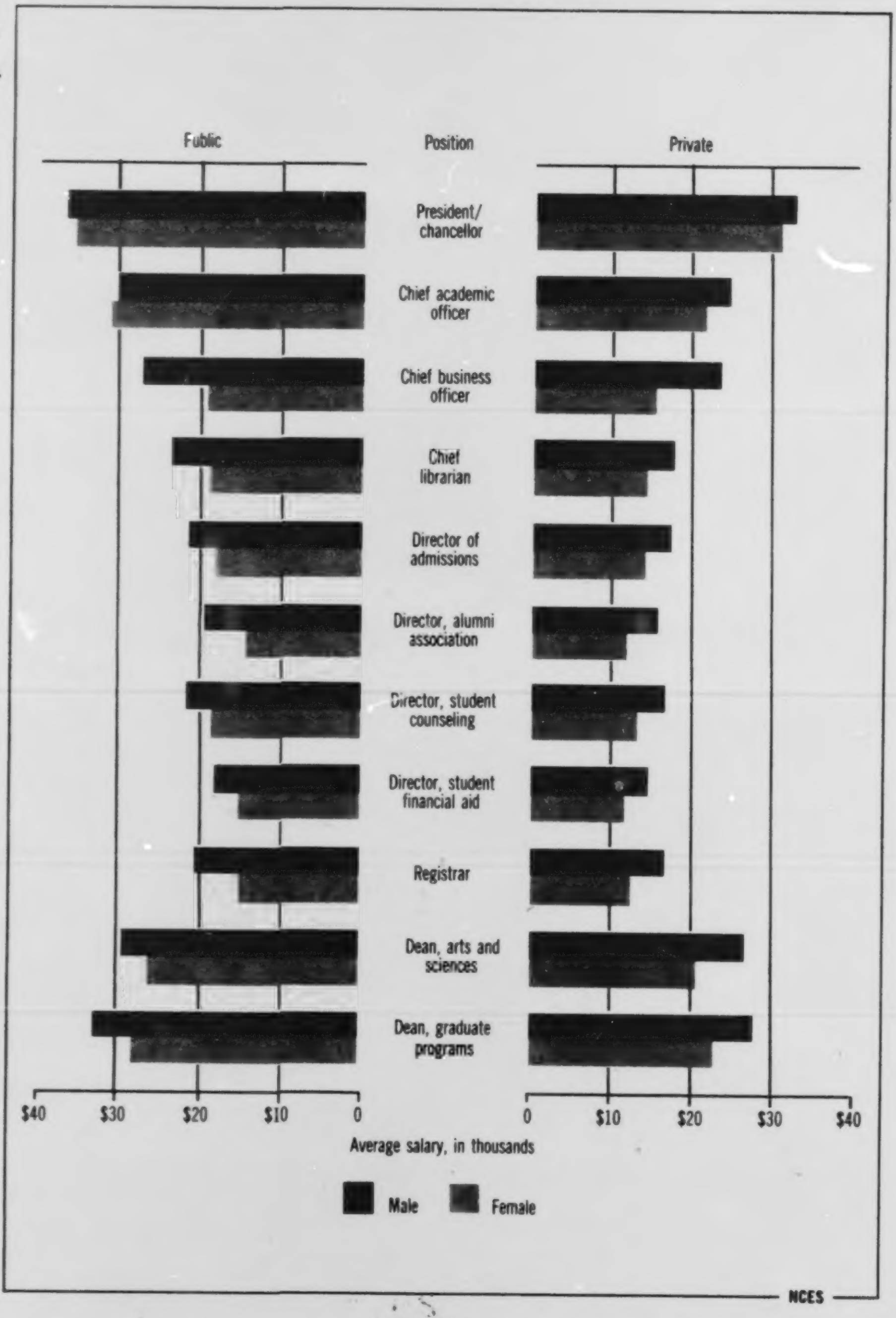


Table 4.15
Sex and racial/ethnic composition of full-time faculty[1] in institutions of higher education, by rank: 1976

		Male						Female					
Rank	Total	Total	White[2]	Black[2]	Asian/ Pacific Islander	Hispanic	American Indian/ Alaskan Native	Total	White[2]	Black[2]	Asian/ Pacific Islander	Hispanic	American Indian/ Alaskan Native
TOTAL[3]	446,034	336,216	312,281	10,791	7,798	4,534	812	109,818	97,131	8,783	1,889	1,741	274
Percent	**100.0**	**75.4**	**70.0**	**2.4**	**1.7**	**1.0**	**0.2**	**24.6**	**21.8**	**2.0**	**0.4**	**0.4**	(4)
Professors:													
Number	98,028	88,656	84,423	1.637	1,087	655	134	9,372	8,623	501	128	102	18
Percent	**100.0**	**90.4**	**86.1**	**1.7**	**1.8**	**0.7**	(4)	**9.6**	**8.8**	**0.5**	**0.1**	**0.1**	(4)
Associate Professors:													
Number	99,592	82,787	77,744	1,941	2,042	903	157	16,805	15,235	999	271	265	35
Percent	**100.0**	**83.1**	**78.1**	**1.9**	**2.1**	**0.9**	**0.2**	**16.9**	**15.3**	**1.0**	**0.3**	**0.3**	(4)
Assistant Professors:													
Number	121,176	86,978	80,003	3,242	2,203	1,299	201	34,198	30,471	2,591	590	486	60
Percent	**100.0**	**71.8**	**66.1**	**2.7**	**1.8**	**1.1**	(4)	**28.2**	**25.1**	**2.1**	**0.5**	(4)	(4)

[1] Includes both 9–10 and 11–12 month contract faculty who teach full-time.

[2] Non-Hispanic.

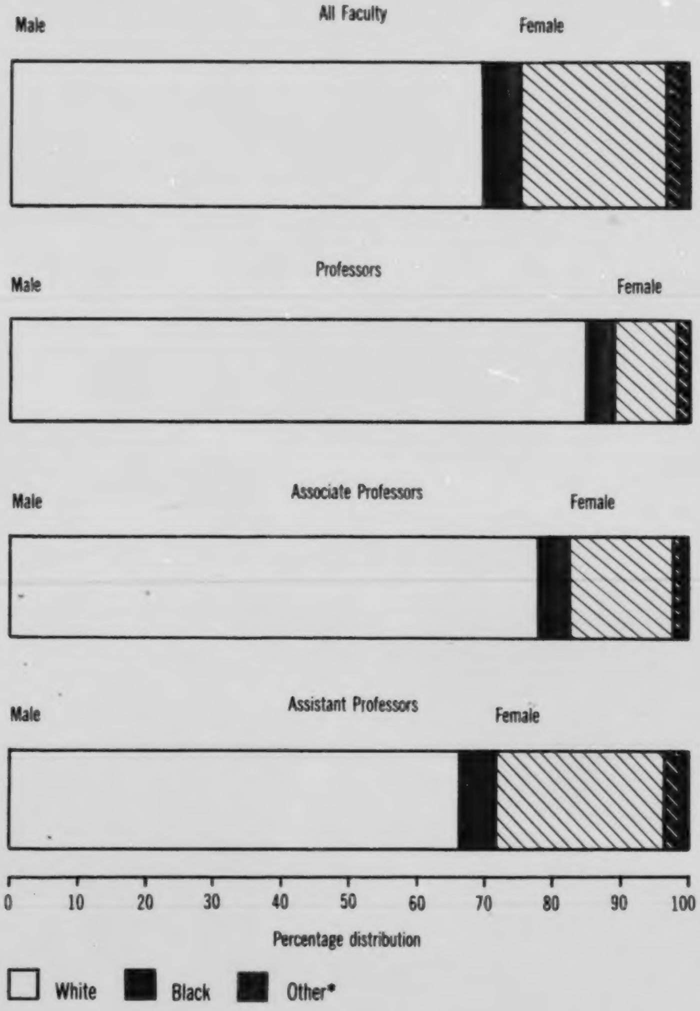
[3] Includes full-time faculty at all ranks including instructors and others.

[4] Less than 0.1 percent.

NOTE: Detail may not add to total because of rounding.
SOURCE: Equal Employment Opportunity Commission, unpublished data.

Chart 4.15
Racial/Ethnic and Sex Composition of Full-time Faculty

The proportion of faculty who are white males increases from about 66 percent at the assistant professor level to about 78 percent of associate professors and about 86 percent of full professors.



*Other includes Hispanic, American Indian, Alaskan Native, Asian and Pacific Islander.

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Table 4.16a
Percentage of colleges and universities with unionized faculty: 1964 to 1976

Year	Percentage
1964	(1)
1965	0.3
1966	0.7
1967	0.9
1968	1.8
1969	2.1
1970	3.4
1971	3.9
1972	5.5
1973	6.5
1974	7.5
1975	8.3
1976	11.7

[1] Less than 0.05 percent.

SOURCE: Richard B. Freeman, "The Job Market for College Faculty," December 1977, unpublished manuscript based on data from the National Center for the Study of Collective Bargaining in Higher Education, Baruch College, CUNY.

Table 4.16b
Number of institutions with faculty collective bargaining agents, by control and type of institutions: 1976

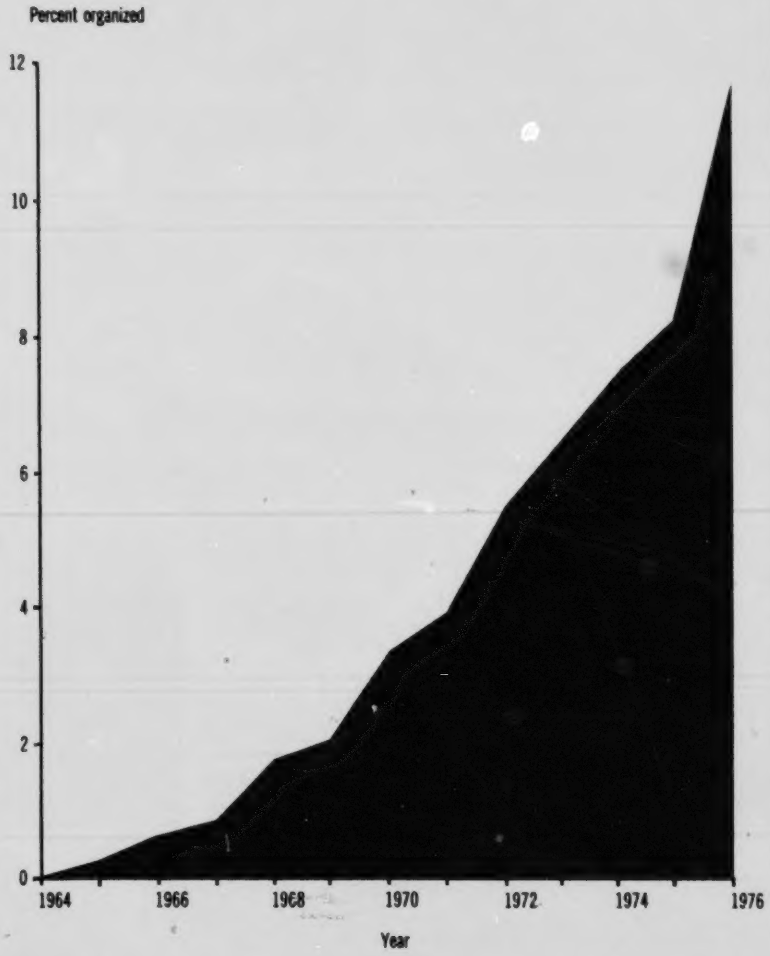
Control and type of institution	Bargaining agent[1]					
	AAUP	NEA	AAUP–NEA	AFT	Independent	AFSCME
Total	41	132	5	101	45	1
4-year institutions	36	30	4	29	17	0
2-year institutions	5	102	1	72	28	1
Public	18	119	4	80	34	1
4-year institutions	15	19	3	15	7	0
2-year institutions	3	100	1	65	27	1
Private	23	13	1	21	11	0
4-year institutions	21	11	1	14	10	0
2-year institutions	2	2	0	7	1	0

[1] AAUP: American Association of University Professors; NEA: National Education Association; AFT: American Federation of Teachers; AFSCME: American Federation of State, County, and Municipal Employees.

SOURCE: American Collective Bargaining Information Service, "Institutions and Campuses With Faculty Collective Bargaining Agents," Special Report No. 12 Update, February 1977.

Chart 4.16
Colleges and Universities With Unionized Faculty

The percentage of colleges and universities with faculty organized by unions has increased from under 1 percent in 1967 to almost 12 percent in 1976.



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Chapter 5
Financing Higher Education

by Jay Noell

The 1960's and early 1970's saw the greatest sustained expansion of enrollments and numbers of faculty in higher education in American history. These years also witnessed major new initiatives by the Federal Government in financing higher education and allocating student aid to help accommodate the increasing number of students. Smaller enrollment increases in recent years have meant that institutions of higher education no longer are as pressed as in the past to finance expansions. But problems of financing higher education remain because of rising costs faced by the institutions and resistance to continued tuition increases.

Tuition and fees paid by students finance only part of the $45 billion a year higher education industry. To finance the remainder institutions of higher education must turn to outside sources. Among public institutions, State governments and the Federal Government are the most important sources of such additional funds; among private institutions, key sources are private donors and the Federal Government. During the 1960's, soaring enrollments made the need for outside support obvious. More recently, the slower growth in enrollments and other changes have deflected attention from this problem. Instead of being assured of a substantial increase in revenues from at least one source, expanding enrollment, colleges and universities may be straining just to maintain past levels of enrollment and revenue from tuition and fees. The fact that the number of men and women of traditional college age will be decreasing in the near future ensures that these problems will continue.

Another factor contributing to the financial problems of higher education is its nature as a service industry. This factor affects the financial health of institutions of higher education in several ways. For one thing, unlike many other industries, productivity improvements are difficult to achieve. Increases in productivity allow other sectors of the economy to absorb higher costs, especially higher labor costs, without suffering serious financial distress or raising the prices of their products dramatically. The inability to make comparable advances in productivity places higher education institutions in a difficult situation. Over 80 percent of their expenditures are for personnel—faculty, administrators, clerical and maintenance support—and they are under constant pressure to increase salaries and wages to match raises in other sectors of the economy.

Adding to this basic problem is inflation. Productivity increases in other sectors reduce some of the impact of inflation on costs and prices. Higher education, on the other hand, must adjust in other ways, such as by limiting salary increases and persuading its clientele that higher education is a bargain even at present tuition and fee levels. In fact, as will be noted below, the relative price of a higher education does not appear to have changed much recently.

A final factor to note in assessing the financial status of higher education is the difference between the public and private sectors. Private institutions of higher education are smaller and more costly. Thus there are additional financial pressures on private institutions if they are to maintain their special appeal and higher spending pattern.

This chapter presents two perspectives on the problem of financing higher education: that of the institutions and that of the students—and their families—who must pay for their education.

The Institutional Perspective

An overview of the financing of institutions of higher education is provided by the patterns of expenditures and revenues among the various types of institutions. Expenditures indicate where and how institutions are spending their funds; revenues indicate sources of financial support.

The current funds expenditures of institutions of higher education reflect the multifunctional character of modern colleges and universities (entry 5.1). All types of institutions spend over 70 percent of their budgets on educational and general expenditures (and mandatory transfers, such as transfers to endowment and plant funds). The largest single category of current funds expenditures by all types of institutions is "student education", which includes expenditures for instruction, academic support, libraries, institutional support, student services, and operation and maintenance of the plant. The proportion spent on "student education", the primary function of institutions of higher education, varies from under 50 percent among private universities to about 87 percent among public 2-year institutions. Expenditures for research, auxiliary enterprises (which provide services such as food and housing, bookstores, and medical services), hospitals, and independent operations (which are primarily federally funded research and development centers) constitute a large part of the remaining expenditures.

Expenditure patterns vary between public and private institutions and between 4-year and 2-year institutions. Overall, public institutions spend proportionately more on educational and general expenditures (and directly on student education), while private institutions spend relatively more on research (including independent operations), auxiliary enterprises (having more resident, as opposed to commuter students), and hospitals. Within the category of educational and general expenditures, public institutions spend relatively more on public service while private institutions spend proportionately more on scholarships and fellowships for students.

Comparing institutions at different levels, 2-year institutions spend proportionately more than universities and other 4-year institutions on instruction, on student services (which include career guidance, counseling, and financial aid administration), and on institutional support (which covers administrative costs). Four-year institutions and universities (especially private universities) spend proportionately more on research (including independent operations) and hospitals.

Current funds revenue patterns also differ substantially between public and private institutions and between 4-year and 2-year institutions (entry 5.2). The most basic differences between public and private institutions lie in the proportions of revenues received from tuition and fees from students, from various levels of government, and from private gifts, grants, and contracts. Among private institutions, revenues from tuition and fees are the largest of the major revenue sources, amounting to over one third of the total revenue. Among public institutions, in contrast, this revenue source amounts to less than 15 percent. Revenues from government, on the other hand, amount to about 65 percent of current funds revenues of public institutions, compared to about 22 percent for private institutions. The percentage of total revenues coming from private gifts, grants, and contracts is over 10 percent for private institutions, while it is only slightly over 2 percent for public institutions.

Among public institutions, universities receive proportionately more funds from the Federal Government than do institutions at other levels; other 4-year institutions get a larger portion of their revenues from State government than the other institutions; and 2-year institutions receive a larger part of their total budget from local governments than do universities and other 4-year institutions, which receive little support from this level of government. Among private institutions, the percentage of revenues raised through student tuition and fees is smallest among universities and largest at 2-year institutions. Just the opposite pattern is observed for the relative shares of current funds revenues received from the Federal Government and endowments, with private universities receiving the largest proportions from these sources and 2-year institutions the smallest. As a summary generalization, it can be observed that all types and levels of institutions are dependent on revenues from a variety of sources. This may lessen their dependence on any one source, but could result in their being in a position of trying to meet diverse expectations.

Time-series data on estimated expenditures of institutions of higher education of funds from government and other sources reveal trends in the financing of higher education (entry 5.3). From 1967-68 to the present, the share of funds for expenditures coming from the Federal Government has declined from about 19 percent to just over 15 percent. Funds for expenditures from State governments, on the other hand, have increased from about 24 percent to almost 30 percent, although among private institutions the increase coming from the States is smaller. The portion of expenditures from all other (i.e., nongovernmental) sources has increased among private institutions, but decreased among institutions of higher education as a whole.

Federal aid to higher education has changed in major ways in recent years (entry 5.4). Total Federal expenditures for higher education were estimated to be $9.5 billion in 1977, an increase of $7.4 billion since 1967, but down slightly from 1976, the peak year. Over the past decade the proportions of aid allocated for various purposes have changed substantially. In 1967, about 48 percent of total Federal expenditures were for the purpose of student support. By 1977, this share had risen to about 83 percent. Institutional support, in contrast, has declined from about 50 percent of total Federal expenditures for higher education in 1967 to about 17 percent in 1977. Most of the decline in institutional support, however, occurred in funds for facilities and equipment; funds for current operations have changed only slightly during these years. Federal support for teacher training has also decreased during the past few years. Finally, Federal expenditures on educational research have tended to fluctuate. In 1968 education research received about 0.5 percent of total Federal expenditures on higher education; this rose to about 1.2 percent in 1972, but was only 0.7 percent in 1977.

Federal expenditures on higher education have changed for different levels of institutions (entry 5.4). A number of trends since 1972 are worthy of note. First, the relative share of Federal outlays for higher education going to 2-year institutions has risen from about 20 percent to approximately 35 percent in 1977. Conversely, the shares allocated to other undergraduate institutions and to graduate and professional education have declined—undergraduate institutions from about 58 to about 52 percent and for graduate and professional institutions from about 23 to about 14 percent.

An important component of Federal aid to institutions of higher education is financial assistance to students (entry 5.5). There are five major U.S. Office of Education (OE) student assistance programs: Basic Educational Opportunity Grants (BEOG); Supplemental Educational Opportunity Grants (SEOG); College Work-Study (CWS); National Direct Student Loans (NDSL); and Guaranteed Student Loans (GSL). The Basic Educational Opportunity Grants program offers eligible students who are enrolled at least half-time direct grants of up to $1,600 a year (or half the cost of attending the institution of their choice), the awards being made on the basis of financial need.

The Supplemental Educational Opportunity Grants program, as its name suggests, supplements the BEOG program. OE gives funds for this program to participating institutions, which make the awards to students. Students who are attending at least half-time are eligible to receive from $200 to $1,500 per year, or up to one half the amount of the other student aid that must be provided by the institution on a matching basis, up to a maximum grant of $4,000 over 4 academic years.

The College Work-Study program provides grants to institutions for partial reimbursement of wages of students enrolled at least half-time. Students may work up to 20 hours a week during school and up to 40 hours a week during vacations. The participating institution decides who gets jobs.

The National Direct Student Loan program provides grants to institutions for making low interest loans to their students. Undergraduates enrolled at least half-time can get as much as $2,500 in low-interest loans over their first 2 years and up to $5,000 total, while graduate and professional students may receive up to a total of $10,000, including loans for their undergraduate education. Repayment of the loan extends over a 10-year period after leaving school.

The Guaranteed Student Loan program is designed to encourage banks and other commercial lending agencies to provide low-interest loans of up to $2,500 a year, up to a maximum of $7,500, for students who are enrolled at least half-time. The Federal Government insures or reinsures the loans (if they were originally insured by State or nonprofit institutions) and pays the interest on the loans while students attend college if their family incomes are below $25,000 annually. The loan repayment period is 10 years after leaving school.

The likelihood of students receiving OE aid and the type of aid received are associated with the control of the institution the student attends. Among all students, about 21 percent attend privately controlled institutions, but among all students receiving aid, over 27 percent attend private institutions (entry 5.5). Of the students receiving aid from the BEOG program, about 20 percent attend private institutions, while those getting aid from the GSL program, about 44 percent do. The level of institution attended is also associated with the type of aid a student is likely to receive. Of the students getting BEOG aid, over 36 percent attend public 2-year institutions, while fewer than 17 percent attend public universities. But among those getting assistance through the NDSL program, fewer than 10 percent attend public 2-year institutions, while about 26 percent attend public universities.

Federal outlays for higher education in the form of OE student assistance and other programs (including some limited institutional support) are probably the most important form of Federal support for higher education. However, Federal tax expenditures, defined as the amount of Federal revenue not collected because income spent in certain ways is not taxed at the standard rates, must also be included in any attempt to assess the Federal role in higher education comprehensively (entry 5.6). In 1977, Federal tax expenditures for higher education amounted to $2.0 billion, up from $1.7 billion in 1974. The largest tax expenditures accounted for by individuals occurs through the parental personal exemption for students aged 19 and over, followed by deductions for contributions by individuals to educational institutions. Next in rank order of amount are tax expenditures due to veterans readjustment benefits, the exclusion from taxation of scholarships and fellowships, and finally to deductions by corporations for contributions to educational institutions.

The provisions for Federal tax expenditures for education are used differently across income classes (entry 5.6). To cite only the extreme cases, about 75 percent of tax expenditures resulting from the exclusion of veterans readjustment benefits are claimed by individuals earning less than $7,000, while almost 93 percent of those claimed through deductions of contributions to educational institutions are made by individuals earning over $20,000 a year.

Federal tax policy and laws have direct implications for the amount of money contributed to educational institutions. These contributions are called voluntary support of higher education (entry 5.7). In 1975–76, voluntary support of higher education reached a new high, having recovered from a decline during the economic recession of 1974–75. Contributions by alumni, general welfare foundations, and business corporations, were also at record highs in 1975–76 in current dollars. Among specific categories of donors, contributions since 1967–68 have increased most among alumni, up about 47 percent, followed by those of business corporations, which went up about 30 percent. Overall, contributions increased about 30 percent over the period of 1967–68 to 1975–76.

The amount of funds expended by universities and colleges for research and development is also an important component of the financial status of higher education. The availability of these funds affects both the number of people employed by universities and colleges and the number of students who can be supported and trained. The research and development activities of institutions of higher education also have a broad impact on the technological, economic, and cultural well-being of our Nation.

From 1968 to 1977, total expenditures for research and development (R & D) by colleges and universities increased from $2.15 billion to $3.96 billion, an increase of about 84 percent (entry 5.8). During this period the contribution of the Federal Government for this purpose increased about 68 percent, although between 1973 and 1974 the absolute amount of funds provided by the Federal Government declined. In comparison with other sources, then, the Federal share of such R & D expenditures declined. All other sources increased their contributions, both relatively and absolutely. While industry's contribution rose the most, over 140 percent, the contribution made by universities and colleges themselves rose over 125 percent.

Estimated expenditures of institutions of higher education have steadily increased in current dollars over the past decade, from about $20 billion in 1967 to an estimated $49 billion in 1977–78 (recall entry 5.3). Projections based on past experience suggest that such expenditures will continue to increase in the future. These increases, however, must be considered in the context of rises in the Consumer Price Index (CPI), reflecting inflation in the economy as a whole, and in the Higher Education Price Index (HEPI), which indicates price changes in higher education (entry 5.9). The HEPI is based on the prices of the basic goods and services purchased by universities and colleges through current funds educational and general expenditures. Those goods and services include: faculty; administrators and other professional service personnel; clerical, technical, service, and other non-professional personnel; contracted services, such as data processing, communication, and transportation, supplies and materials; equipment, books and periodicals; and utilities.

The CPI, which set prices in fiscal year 1967 equal to an index of 100, stood at about 176 in fiscal year 1977, reflecting inflation. In contrast, the Higher Education Price Index, which also was set equal to 100 in 1967, had risen to almost 189. Thus the costs of goods and services purchased by colleges and universities had risen more than those purchased by the general consumer, as indicated by the CPI.

Increases in the prices (and hence the indexes) of the specific goods and services purchased by higher education institutions show considerable diversity. The cost of utilities, which include natural gas, residual fuels, commercial power, and water and sewerage, has risen substantially. In 1977, the higher education index for utilities was up to about 258. The prices of books and periodicals, however, had risen even more and its index stood at almost 268. At the same time, the index of faculty salaries in 1977 was only at about 169, although the faculty fringe benefits index level had increased at a somewhat higher rate. In sum, while inflation has differentially affected the various goods and services purchased by colleges and universities, its effect on higher education in general has been greater than on the economy as a whole. The recent increase in Social Security taxes, which involves increasing both the maximum taxable earnings and the tax contribution rate, is also likely to increase costs more among institutions of higher education than in the economy as a whole. The new Social Security taxes make employees more expensive and differentially affect labor intensive industries that have limited ability to increase their productivity levels.

A general indicator of the financial condition of institutions of higher education is the level of "student education" expenditures per full-time-equivalent student (entry 5.10). These expenditures indicate the level of resources allocated by institutions of higher education for purposes of "student education," as opposed to their various other functions, such as private service or research. Adjusting these expenditures for inflation (by using constant 1976–77 dollars) allows a comparison over time. Since 1967, private institutions of higher education have spent more per full-time-equivalent student than public institutions on "student education." In fiscal year 1977, private institutions spent $3,805 per full-time-equivalent student, while public institutions spent $2,804. These amounts are greater than such expenditures for 1976, but down from the peak year of 1973 for private institutions, when $4,135 per full-time-equivalent student was spent, and of 1974 for public institutions, when $2,972 was spent.

The Student and Family's Perspective

The problem of financing higher education can also be examined from the viewpoint of students and their families. Since student tuition and fees constitute an important part of the revenues of institutions of higher education, especially private institutions, the problems that students and their families have in paying for a college education are also felt by the institution.

Almost two-thirds of all entering freshmen in fall 1977 expressed concern about their ability to finance their college education. The magnitude of their problem of paying for a higher education is suggested by the actual expenditures reported by participants in the National Longitudinal Study of the High School Class of 1972 (NLS), a number of whom recently completed 4 years of college (entry 5.11). Both the total expenditures and the patterns of expenditures found among the various types of students are of interest. Over the period in question, average expenditures increased from $1,794 in 1972-73 to $2,795 in 1975-76 for all students attending all types of institutions of higher education. Some of this increase was due to increased costs for tuition, room and board, and other expenses, but some also resulted from the smaller percentage of students attending 2-year institutions during the latter 2 years.

More interesting is the pattern of differences in expenditures among students classified in terms of ability, race or ethnicity, sex, and family socioeconomic status. Among students grouped by ability, the amount spent on education is positively related to ability. In terms of race and/or ethnicity there were substantial differences among the various groups. White students reported spending the most, followed by those other than black or Hispanic. Comparing black and Hispanic students, blacks reported spending more in 1972-73, but Hispanics spent more in 1975-76. Between the sexes, females spent slightly more in 1972-73, but males spent more in each of the other years. Finally, among all students there is a relationship between a student's socioeconomic status (SES) and his or her total educational expenses, with those of highest SES spending the most, except for those attending 2-year institutions in 1974-75 and 1975-76.

To finance their education, students use a variety of sources, as data also reported by participants in the NLS indicate (entry 5.12). Data from 1972-73 show that the degree to which various sources are drawn upon is associated with the characteristics of the students. The lower the family income reported by the student, the more likely he or she is to depend upon funds in the form of grants, transfer payments (i.e., veterans's readjustment and Social Security benefits), loans, and term-time work, and the less likely is he or she to depend on contributions by parents. In contrast, a student's ability shows little association with the sources used, although a low ability student is slightly more likely to use his or her own savings, while a high ability student is slightly more likely to have received funds as a grant or transfer payment. In terms of racial or ethnic background, greater differences are again apparent: a white student is less likely to get grants or transfer payments and more likely to rely upon contributions of parents. He or she is also slightly more likely to use his or her own savings. Between the sexes, a female is more likely to get parental contributions, and a male to have drawn upon his own savings. Among all students, parental contributions are the largest source of funds.

Given that students are more dependent upon contributions from parents than from other sources, it is worth looking at the level of average student charges for college as a proportion of median family (gross) income (entry 5.13). There was little change from 1967 to 1976 in average charges for tuition, board and room per full-time undergraduate (resident degree-credit) student in relation to the median (gross) income of all families. Although these data suggest that a higher education has not become relatively more expensive over time in terms of the median (gross) income of families, a caveat is in order. This finding may not hold if education charges are related to net income (i.e., after taxes) since the higher incomes reported by people due to inflation subject many people to higher tax rates.

A related factor that may make it more difficult for families to provide financial assistance to college-age children is what David Goldberg and Albert Anderson call the "sibling squeeze" (entry 5.14). This is the phenomenon resulting from past patterns of births, especially during the "baby boom" years, whereby some families now have more children of college-age (18 to 21 years) at one time. This makes it more difficult for a family to provide assistance to all of their children at the same time. Census data from 1960 and 1970 show that for the present and near future (through approximately 1981) the proportion of families having an 18-year-old child and another child of college age is greater than past levels or levels that will occur in the mid-1980s after the baby boom children have passed college age. It can also be seen that this pattern is found relatively more frequently among black than among white families.

An important policy issue related to financing higher education is the distribution of financial aid to students. There are several types of aid: grants and scholarships, which do not have to be repaid; term-time jobs; loans, which must be repaid; and transfer benefits (veterans readjustment and Social Security [old age, survivors, and handicapped insurance] benefits). About 33 percent of the freshmen in 1977 reported receiving aid from the OE's Basic Educational Opportunity Grant program (entry 5.15). The next most frequently cited source of aid was State grants (21 percent), followed by College Work-Study (16 percent), GSL loans (13 percent), NDSL loans (11 percent), and SEOG grants (9 percent). In comparison, about 80 percent of the freshmen received aid from their parents.

Data from the National Longitudinal Study indicate the characteristics of students receiving aid in 1972–73, before the full impact of the Education Amendments of 1972 (expanding the BEOG program) was felt. These data indicate that the proportion of students receiving aid of any type (except from parents) was about 56 percent (entry 5.16). Rates of aid received varied by family income, racial/ethnic group, and achievement group, as well as by type of institution attended. The likelihood of obtaining aid was inversely related to family income, with students from low-income families most likely to report having received financial assistance. Among racial/ethnic groups, white students were least likely to receive aid, and black students most likely. When classified by ability, only students of highest ability report a higher than average rate of receipt of aid. Type of institution attended also affected the probability of receiving aid, with those attending private institutions reporting a higher incidence of aid.

The composition of the "aid packages" (Federal—grant, work-study position, loan, transfer benefit—or non-Federal) varied considerably among 1972–73 full-time freshman NLS participants (entry 5.17). The amount of total and Federal aid received was inversely related to a student's family income. Among low-income students receiving aid, for example, the share of assistance of Federal origin was about 61 percent; among higher income students it was about 42 percent. Non-Federal aid to a student, on the other hand, increased slightly as family income increased. Composition of aid packages also varied according to ability level. While total aid was positively related to a student's ability group, Federal aid both in absolute and relative terms was inversely related. Among racial and ethnic groups, black students receive the most total and Federal aid. Students' aid packages also differed in composition depending upon the control of the institution they attended. While students attending public institutions received proportionately more aid from Federal sources, students attending private institutions received more Federal aid dollars.

Given the importance of Federal aid, a closer examination of the amount and type of Federal money available to assist all types of students is warranted (entry 5.18). In 1977 Federal expenditures for student support were estimated to amount to $7.9 billion, up from $1.5 billion in 1968, but down from $8.2 billion in 1976. As of 1976, the greatest increase in aid, both absolutely and relatively, was in veterans readjustment benefits. Such benefits are awarded to veterans enrolled in approved educational or training programs. Men and women in active service before January 1, 1977, automatically receive $225 or more a month for up to 36 months. Those who entered service after that date who want educational benefits after service must contribute a portion of their service pay for at least 12 months to an educational assistance fund. The Veterans Administration then matches every dollar contributed by the veteran with two dollars.

In 1968 veterans readjustment benefits constituted about 27 percent of all Federal expenditures for student support. In 1976 they represented almost 53 percent of such expenditures, although they are expected to become less important in the next few years. Expenditures for the BEOG, CWS, and SEOG programs also increased substantially after 1974. They reached 19 percent of all Federal student support in 1976 and are expected to increase over the next several years. In contrast, Federal expenditures for student loans have generally been decreasing as a share of Federal student support and are expected to be further reduced by 1978.

As noted in chapter 3 a longstanding concern of many educators has been to increase the access of students, such as the poor, traditionally excluded from institutions of higher education. OE has addressed this concern in its aid programs (entry 5.19). Students whose parental incomes are less than $7,500 constitute about 33 percent of all student recipients of OE aid, while those whose family incomes are $15,000 or more make up only 9 percent of aided students. Independent undergraduate or graduate students constitute 28 percent of all students getting assistance from the Office of Education. The types of aid students receive from OE are also associated with their parental income level. BEOG grants are most likely to go to students whose parents earn less than $7,500, while GSL loans are most likely to go to students whose parental income is $15,000 and over or to independent students. The other types of aid are more likely to go to the students whose parents earn under $7,500.

Student aid distributed as Social Security benefits and as veterans readjustment benefits ("GI Bill" benefits) also helps those in financial need (entry 5.20). This is especially the case among recipients of veterans readjustment benefits, 49 percent of whom report earning less than $7,500 a year. Among students receiving Social Security benefits, 46 percent (and 39 percent of all beneficiaries attending college) report family incomes of less than $8,000. The payments received by students under this program are made to 18- to 21-year-old children of deceased, retired, or disabled workers as long as the students remain unmarried and attend college full-time. Benefit levels are based on the Social Security contributions made by the wage earner.

Perhaps the most important consideration in financing higher education is the net price of going to college. Net price is the difference between the total expenses required for college minus the sum of family resources and grant aid (including BEOG, SEOG, State aid, local and private scholarships, Veterans' benefits and Social Security dependence benefits). It is the "cost" that largely accrues to the student, and which, in most cases, must be met by loans or part-time work. In evaluating the accessibility of college to students from all income levels, net price is a basic consideration. While net price is obviously related to the amount charged by colleges for tuition and fees, of special interest is its variation across parental income levels (entry 5.21). In general net price tends to increase slightly as parental income increases up to a level of $20,000 a year. Then it declines substantially, especially among students who come from families earning $30,000 or more. Except for those students from families having parental incomes of $20,000 or more, then, net price has little association with parental income. These data suggest that substantial progress has been made in making college accessible to students without regard to the level of income of their parents.

Table 5.1
Current funds expenditures and mandatory transfers of institutions of higher education, by control and level of institution and by purpose: 1975-76

Purpose	Public						Private					
	Universities		Other 4-year		2-year		Universities		Other 4-year		2-year	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
	(Amounts in thousands)											
TOTAL	$11,081,437	100.0	$10,310,430	100.0	$4,792,089	100.0	$5,996,450	100.0	$6,422,901	100.0	$299,869	100.0
Educational and general	8,715,556	78.7	8,078,014	78.3	4,489,432	93.7	4,336,017	72.3	4,733,462	73.7	246,204	82.1
Student education [1]	5,953,472	53.7	6,817,843	66.1	4,147,979	86.6	2,924,103	48.8	3,830,663	59.6	216,299	72.1
Research [2]	1,565,659	14.1	574,046	5.6	14,736	0.3	925,223	15.4	206,777	3.2	922	0.3
Scholarships and fellowships [3]	355,164	3.2	305,669	3.0	137,682	2.9	349,920	5.8	468,732	7.3	18,692	6.2
Public service	728,537	6.6	226,798	2.2	80,373	1.7	88,744	1.5	111,863	1.7	2,284	0.8
Mandatory transfers [4]	112,725	1.0	153,657	1.5	108,656	2.3	48,027	0.8	115,426	1.8	8,007	2.7
Auxiliary enterprises [5]	1,406,845	12.7	1,118,757	10.9	302,514	6.3	577,242	9.6	1,017,818	15.8	53,665	17.9
Hospitals and independent operations [6]	959,032	8.7	1,113,659	10.8	143	(7)	1,083,192	18.1	671,621	10.5	0	0

[1] Includes instruction, academic support, libraries, institutional support, student services and operation and maintenance of the plant. These are the items most nearly comparable to "student education" expenditures reported prior to 1974-75.

[2] Includes all sponsored research and other separately budgeted research with the exception of federally funded research and development centers which are included under "independent operations".

[3] Moneys given in the form of outright grants and trainee stipends to individuals enrolled in formal coursework, either for credit or not. Includes aid in the form of tuition or fee remissions. Prior to 1974-75 this category was entitled "student aid" and was not an educational and general item.

[4] Mandatory transfers from current funds are those that must be made to fulfill a binding legal obligation of the institution. Includes debt service provisions relating to academic buildings, including amounts set aside for debt retirement and interest, and required provisions for renewal and replacements to the extent not financed from other sources.

[5] Includes residence halls, food services, college store, and intercollegiate athletics. Includes mandatory transfers from auxiliary enterprises.

[6] Includes expenditures for hospitals and for "independent operations" which are generally limited to expenditures of federally funded research and development centers. Includes mandatory transfers from hospitals and independent operations.

[7] Less than 0.05 percent.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished tabulations.

Chart 5.1
Distribution of Current Funds Expenditures of Institutions of Higher Education

Current funds expenditure patterns vary among universities, other 4-year institutions, and 2-year institutions. Compared to 2-year institutions, universities and other 4-year institutions spend proportionally more on research and less on "student education."

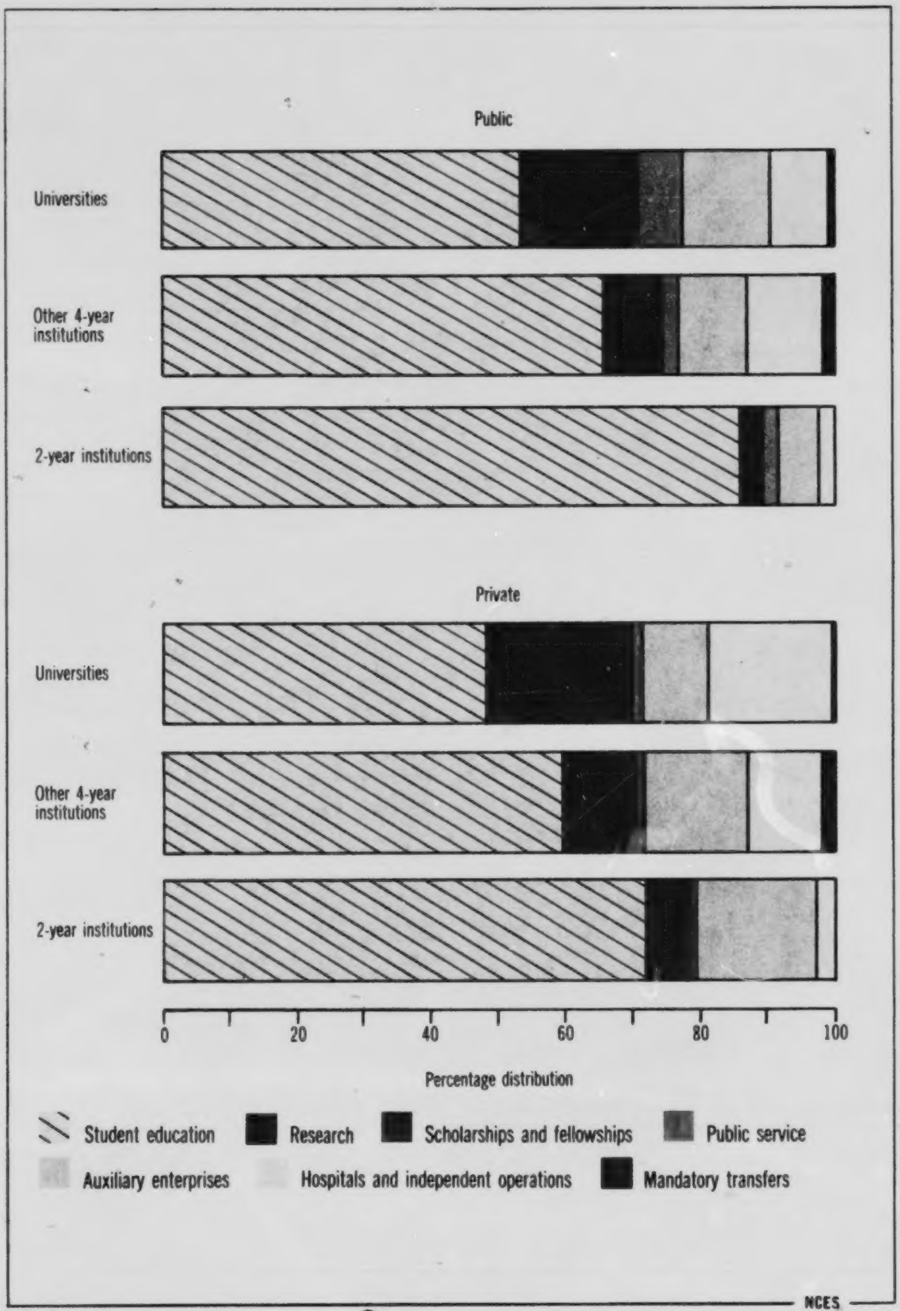

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Table 5.2
Current funds revenues of institutions of higher education, by control and level of institution and by source of revenue: 1975–76

Source	Public						Private					
	Universities		Other 4-year		2-year		Universities		Other 4-year		2-year	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
	(Amounts in thousands)											
TOTAL	$11,321,977	100.0	$10,519,424	100.0	$4,993,497	100.0	$6,061,835	100.0	$6,495,804	100.0	$310,629	100.0
Tuition and fees from students	1,438,651	12.7	1,309,623	12.5	729,292	14.6	1,681,092	27.7	2,847,025	43.8	166,259	53.5
Federal Government	2,007,136	17.7	1,597,005	15.2	396,981	8.0	1,645,020	27.1	812,562	12.5	18,476	5.9
Unrestricted appropriations	265,268	2.3	402,863	3.8	113,747	2.3	69,155	1.1	52,511	0.8	2,933	0.9
Unrestricted grants and contracts	204,766	1.8	98,915	0.9	19,343	0.4	231,917	3.8	65,856	1.0	1,881	0.6
Restricted grants and contracts	1,339,737	11.8	894,707	8.5	263,828	5.3	958,428	15.8	414,345	6.4	13,650	4.4
Independent operations (FFRDC)[1]	197,365	1.7	200,520	1.9	63	(2)	385,520	6.4	279,850	4.3	12	(2)
State governments	4,723,670	41.7	5,000,755	47.5	2,233,912	44.7	137,858	2.3	150,982	2.3	8,709	2.8
Unrestricted appropriations	4,536,725	40.1	4,874,528	46.3	2,153,811	43.1	72,343	1.2	94,546	1.5	4,046	1.3
Unrestricted grants and contracts	12,030	0.1	9,355	(2)	13,527	0.3	6,066	0.1	13,955	0.2	2,432	0.8
Restricted grants and contracts	174,915	1.5	116,872	1.1	66,574	1.3	59,449	1.0	42,481	0.7	2,231	0.7
Local governments	48,582	0.4	266,538	2.5	1,184,408	23.7	76,110	1.3	38,986	0.6	2,351	0.8
Unrestricted appropriations	27,195	0.2	219,598	2.1	1,168,800	23.4	74	(2)	2,304	(2)	1,573	0.5
Unrestricted grants and contracts	1,601	(2)	1,841	(2)	3,816	(2)	7,469	0.1	3,006	(2)	413	0.1
Restricted grants and contracts	19,786	0.2	45,099	0.4	11,792	0.2	68,567	1.1	33,676	0.5	365	0.1
Private gifts, grants, and contracts	403,720	3.6	189,223	1.8	23,466	0.5	558,407	9.2	704,340	10.8	37,880	12.2
Unrestricted	32,294	0.3	17,974	0.2	8,782	0.2	182,622	3.0	521,379	8.0	33,318	10.7
Restricted	371,426	3.3	171,249	1.6	14,684	0.3	375,785	6.2	182,961	2.8	4,562	1.5
Endowment income	66,026	0.6	28,599	0.3	2,373	(2)	325,847	5.4	259,639	4.0	4,987	1.6
Unrestricted	28,672	0.3	13,718	0.1	2,199	(2)	148,148	2.4	170,899	2.6	4,304	1.4
Restricted	37,354	0.3	14,881	0.1	173	(2)	177,699	2.9	88,740	1.4	683	0.2
Sales and services	2,410,198	21.3	1,958,089	18.6	317,882	6.4	1,474,718	24.3	1,464,887	22.6	61,607	19.8
Educational activities	279,703	2.5	124,118	1.2	19,437	0.4	170,180	2.8	49,959	0.8	2,022	0.7
Auxiliary enterprises	1,465,763	12.9	1,125,304	10.7	298,445	6.0	568,945	9.4	1,029,579	15.9	59,585	19.2
Hospitals	664,732	5.9	708,667	6.7	0	0.0	735,593	12.1	385,349	5.9	0	0.0
Other sources	223,994	2.0	169,592	1.6	100,184	2.0	162,784	2.7	217,886	3.4	10,359	3.3

[1] Generally includes only those revenues associated with major federally funded research and development centers.
[2] Less than 0.05 percent.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, unpublished tabulations.

Chart 5.2
Current Funds Revenues of Institutions of Higher Education

The largest share of the current funds revenues for public institutions of higher education comes from State governments; for private institutions, it comes from tuition and fees from students.

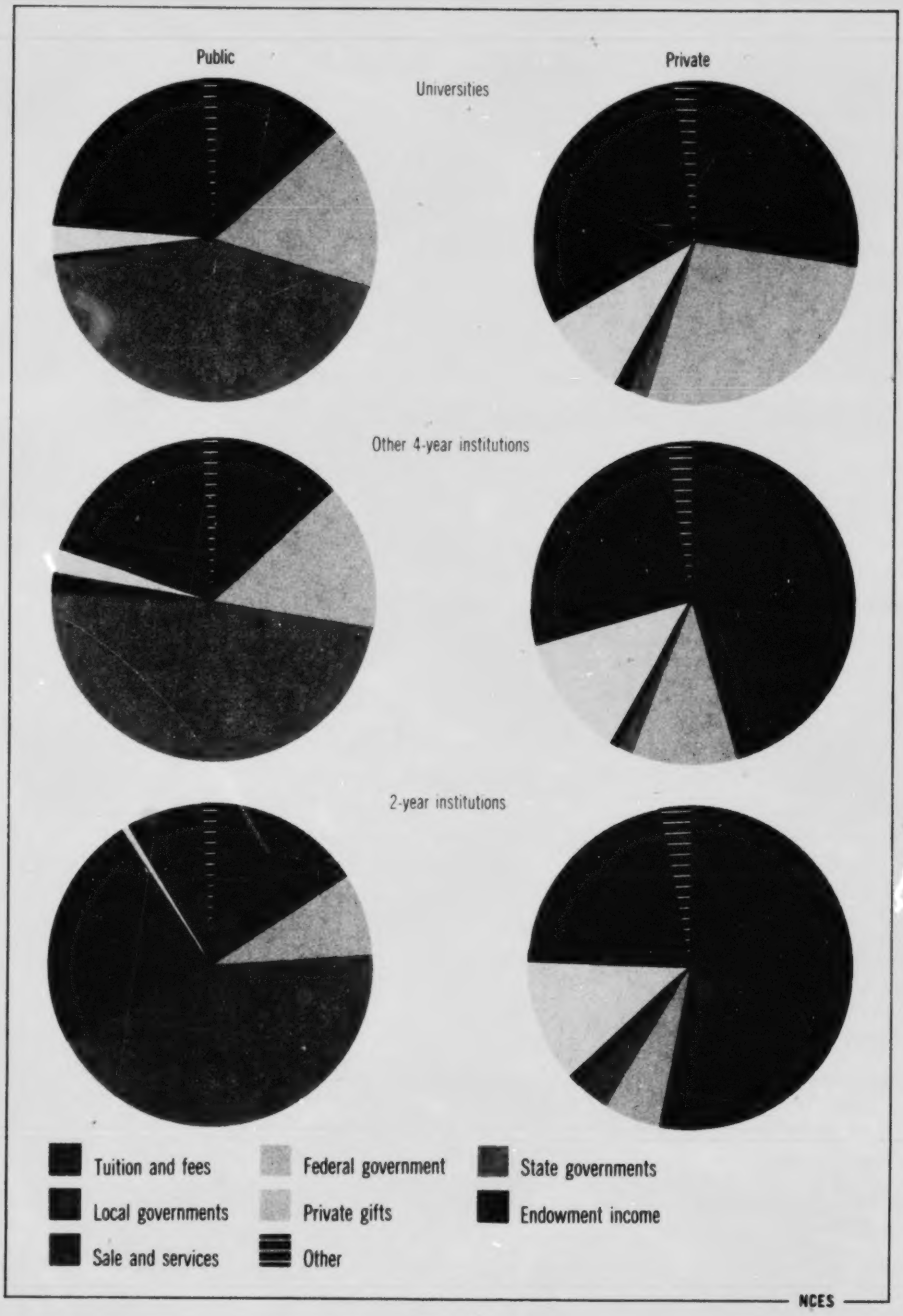

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Table 5.3
Estimated expenditures of institutions of higher education, by source of funds and control of institution: 1968 to 1978

Source of funds by control of institution	1968	1970	1972	1974	1976	1977
	School year ending					
	(Amount in billions)					
TOTAL	$19.9	$24.7	$29.2	$34.3	$42.7	$45.5
Federal	3.8	4.1	4.6	5.1	6.5	7.0
State	4.8	6.4	7.8	9.7	12.8	13.5
Local	0.6	0.9	1.1	1.4	1.7	1.8
Other	10.7	13.3	15.7	18.1	21.7	23.2
Public	12.3	15.8	19.1	22.9	29.1	30.8
Federal	2.1	2.4	2.8	3.2	4.0	4.3
State	4.7	6.3	7.6	9.4	12.5	13.2
Local	0.6	0.8	1.0	1.3	1.6	1.7
Other	4.9	6.3	7.7	9.0	11.0	11.6
Nonpublic	7.6	8.9	10.1	11.4	13.6	14.7
Federal	1.7	1.7	1.8	1.7	2.5	2.7
State	0.1	0.1	0.2	0.3	0.3	0.3
Local	(*)	0.1	0.1	0.1	0.1	0.1
Other	5.8	7.0	8.0	9.1	10.7	11.6
	Percentage distribution					
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Federal	19.1	16.6	15.7	14.9	15.2	15.4
State	24.1	25.9	26.7	28.3	30.0	29.7
Local	3.0	3.6	3.8	4.1	4.0	3.9
Other	53.8	53.9	53.8	52.7	50.8	51.0
Public	100.0	100.0	100.0	100.0	100.0	100.0
Federal	17.3	14.9	14.7	14.1	13.8	13.8
State	38.2	39.7	39.7	41.1	43.0	43.0
Local	4.6	5.1	5.4	5.5	5.4	5.4
Other	39.9	40.3	40.2	39.3	37.8	37.8
Nonpublic	100.0	100.0	100.0	100.0	100.0	100.0
Federal	22.1	18.8	18.3	17.1	18.1	18.1
State	1.3	1.6	2.0	2.5	2.3	2.3
Local	0.3	0.7	0.5	0.6	0.8	0.8
Other	76.3	78.9	79.2	79.8	78.8	78.8

*Less than $50 million.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Educational Statistics to 1979–1980*, and *Projections of Education Statistics to 1986–87*, forthcoming.

Chart 5.3
Estimated Expenditures of Institutions of Higher Education, by Source

The proportion of expenditures coming from Federal sources has decreased from 19.1 percent in 1968 to 15.4 percent in 1977, while that coming from States has increased from 24.1 percent to 29.7 percent.

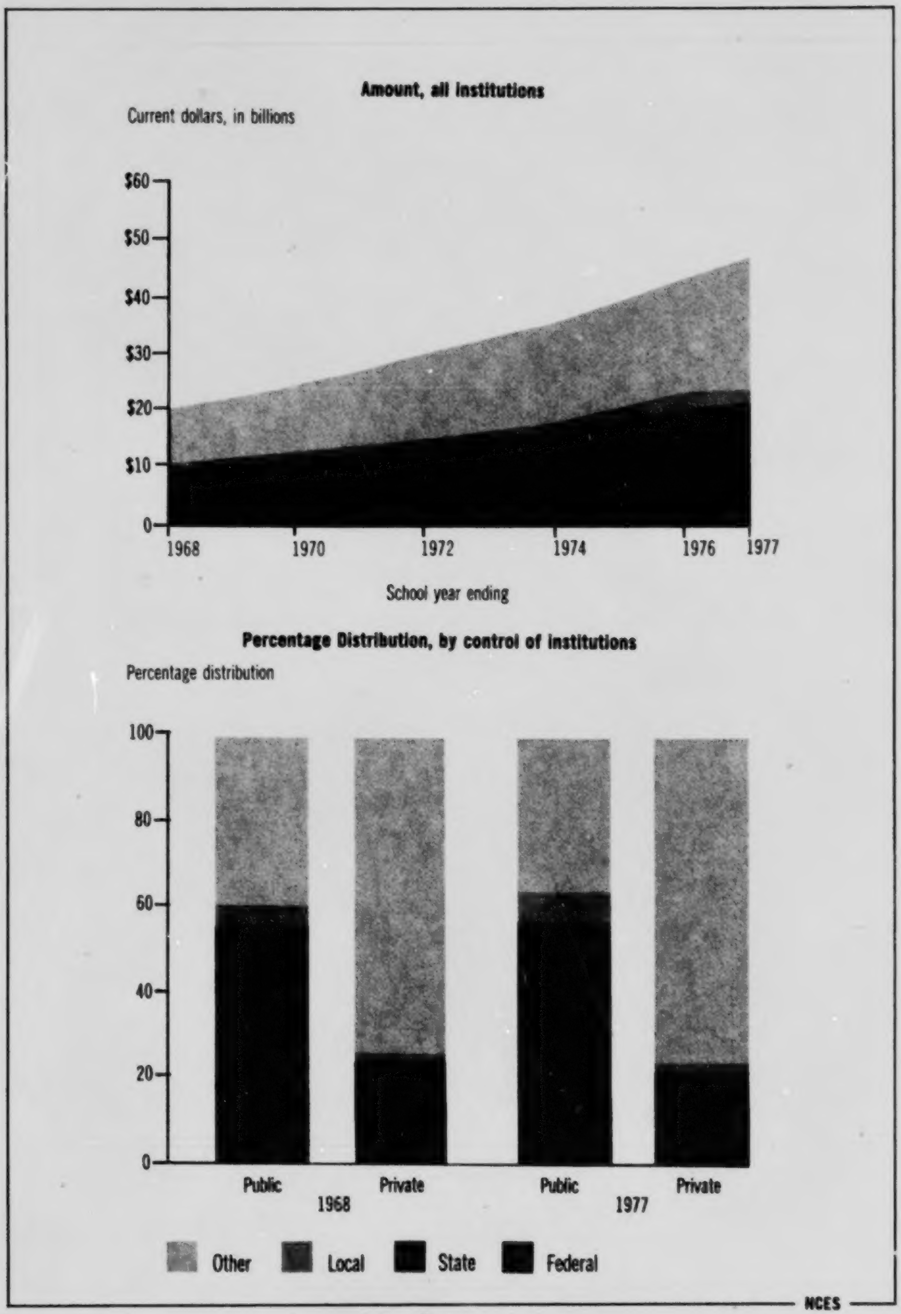

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Table 5.4
Federal expenditures on higher education, by type of support and by level of institution of higher education: Fiscal years 1967 to 1978

Type of support and level of institution	Actual										Estimated	
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Type of support:	(In millions)											
Total	$2,069	$2,930	$3,015	$3,633	$4,582	$4,883	$5,801	$5,992	$8,298	$9,901	$9,480	$8,193
Student support	984	1,455	1,688	2,128	2,997	3,375	4,221	4,391	6,558	8,178	7,886	6,704
Institutional support:												
Current operations	208	429	452	659	864	902	1,010	1,083	1,286	1,381	1,308	1,201
Facilities—equipment	818	954	761	800	622	487	491	432	375	276	190	166
Teacher training	59	76	87	21	[1]56	67	46	45	23	18	34	36
Educational research		16	27	25	[1]43	52	33	41	56	48	62	86
	Percentage distribution											
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Student support	47.6	49.7	56.0	58.6	65.4	69.1	72.8	73.3	79.0	82.6	83.1	81.8
Institutional support:												
Current operations	10.1	14.6	15.0	18.1	18.9	18.5	17.4	18.1	15.5	13.9	13.8	14.7
Facilities—equipment	39.5	32.6	25.2	22.0	13.6	10.0	8.5	7.2	4.5	2.8	2.0	2.0
Teacher training	2.9	2.5	2.9	0.6	1.2	1.3	0.8	0.8	0.3	0.2	0.4	0.4
Educational research		0.5	0.9	0.7	0.9	1.1	0.6	0.7	0.7	0.5	0.7	1.0
Level of institution:	(In millions)											
Total	(2)	(2)	(2)	(2)	(2)	$4,883	$5,801	$5,992	$8,298	$9,901	$9,480	$8,193
2-year institution	(2)	(2)	(2)	(2)	(2)	956	1,302	1,572	2,730	3,473	3,274	2,868
Other undergraduate	(2)	(2)	(2)	(2)	(2)	2,808	3,220	3,166	4,060	4,766	4,899	4,139
Graduate and professional	(2)	(2)	(2)	(2)	(2)	1,119	1,279	1,254	1,508	1,662	1,307	1,186
	Percentage distribution											
Total	(2)	(2)	(2)	(2)	(2)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2-year institution	(2)	(2)	(2)	(2)	(2)	19.6	22.4	26.2	32.9	35.1	34.5	35.0
Other undergraduate	(2)	(2)	(2)	(2)	(2)	57.5	55.6	52.8	48.9	48.1	51.7	50.5
Graduate and professional	(2)	(2)	(2)	(2)	(2)	22.9	22.0	20.9	18.2	16.8	13.8	14.5

[1] Slight change in definition occurred in 1971.
[2] Consistent data not available.

SOURCE: Executive Office of the President, Office of Management and Budget, *Special Analyses, Budget of the United States Government,* various years.

Chart 5.4
Federal Expenditures on Higher Education, by Type of Support

The share of Federal expenditures for higher education allocated to student support has increased from 47.6 percent in 1967 to 82.6 percent in 1976.

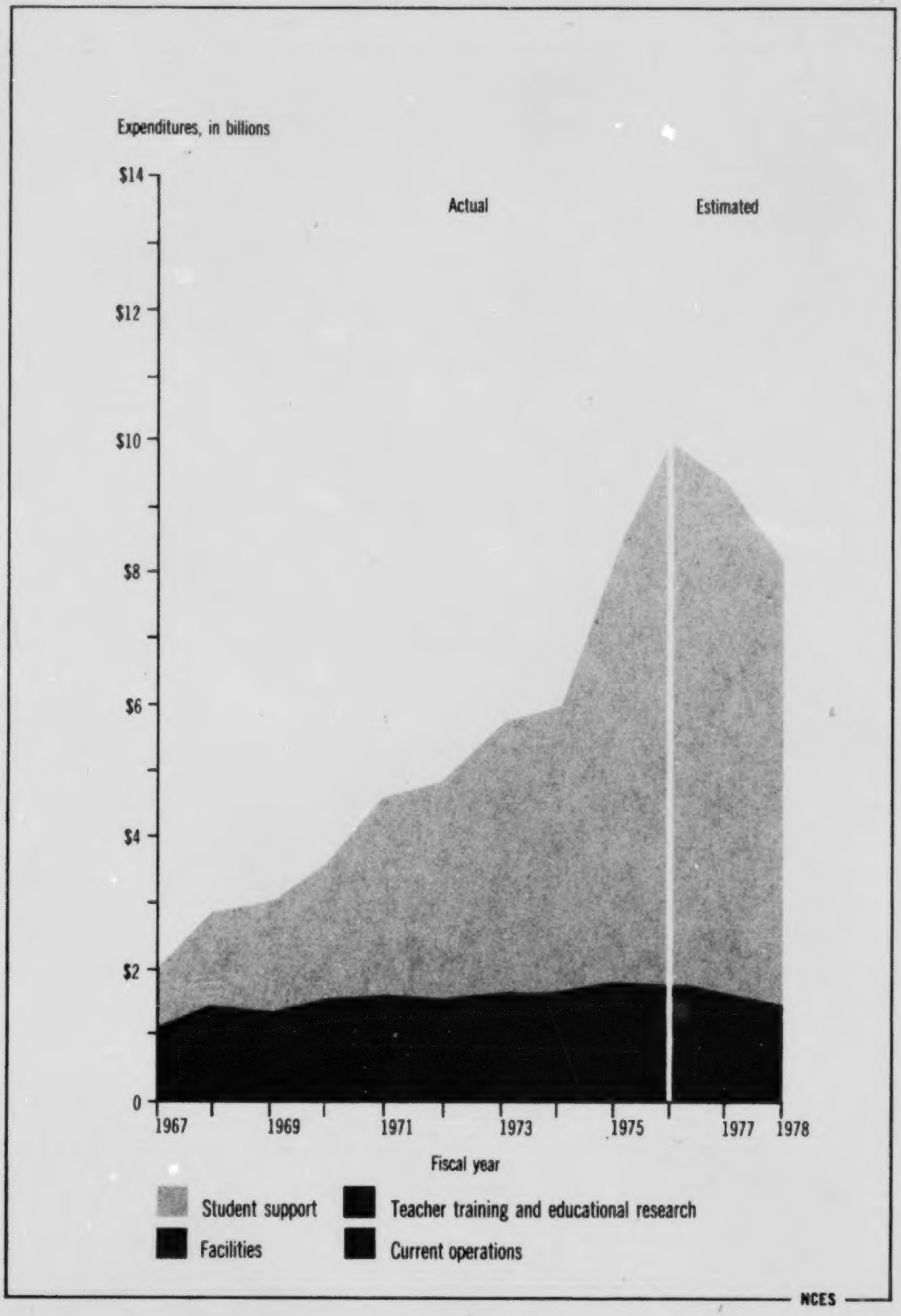

Table 5.5
Percentage distribution of students and students receiving aid under U.S. Office of Education assistance programs, by control and level of institution: 1976–77

Institution by control and level	Enrollment	Total aided (unduplicated count) [1]	Program [2]				
			BEOG	SEOG	CWS	NDSL	GSL
Total number (in thousands)	11,012	1,937	1,411	432	698	757	695
Total percent	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
PUBLIC: TOTAL	**78.6**	**72.6**	**79.9**	**63.3**	**64.1**	**61.4**	**56.0**
University	**18.9**	**19.3**	**16.6**	**17.7**	**17.8**	**25.9**	**25.4**
Other 4-year	**25.6**	**24.8**	**26.9**	**24.9**	**25.5**	**25.9**	**22.5**
2-year	**34.1**	**28.5**	**36.5**	**20.6**	**20.8**	**9.6**	**8.0**
PRIVATE: TOTAL	**21.4**	**27.4**	**20.1**	**36.7**	**35.9**	**38.6**	**44.0**
University	**6.4**	**5.8**	**3.2**	**6.1**	**6.8**	**10.2**	**16.2**
Other 4-year	**13.9**	**19.3**	**14.6**	**26.0**	**26.0**	**25.7**	**26.1**
2-year	**1.2**	**2.3**	**2.3**	**4.6**	**3.1**	**2.6**	**1.7**

[1] Excludes Guaranteed Student Loan Program.

[2] BEOG: Basic Educational Opportunity Grant; SEOG: Supplemental Educational Opportunity Grant; CWS: College Work-Study; NDSL: National Direct Student Loan; GSL: Guaranteed Student Loan.

NOTE: Details may not add to total because of rounding and/or weighting of sample results in making national estimates.

SOURCE: American Council on Education, Higher Education Panel, *Estimated Number of Student Aid Recipients, 1976–77.*

Chart 5.5
Institutions Enrolling Students Receiving U.S. Office of Education Assistance

The proportion of students who receive OE financial aid is higher at private than at public institutions.

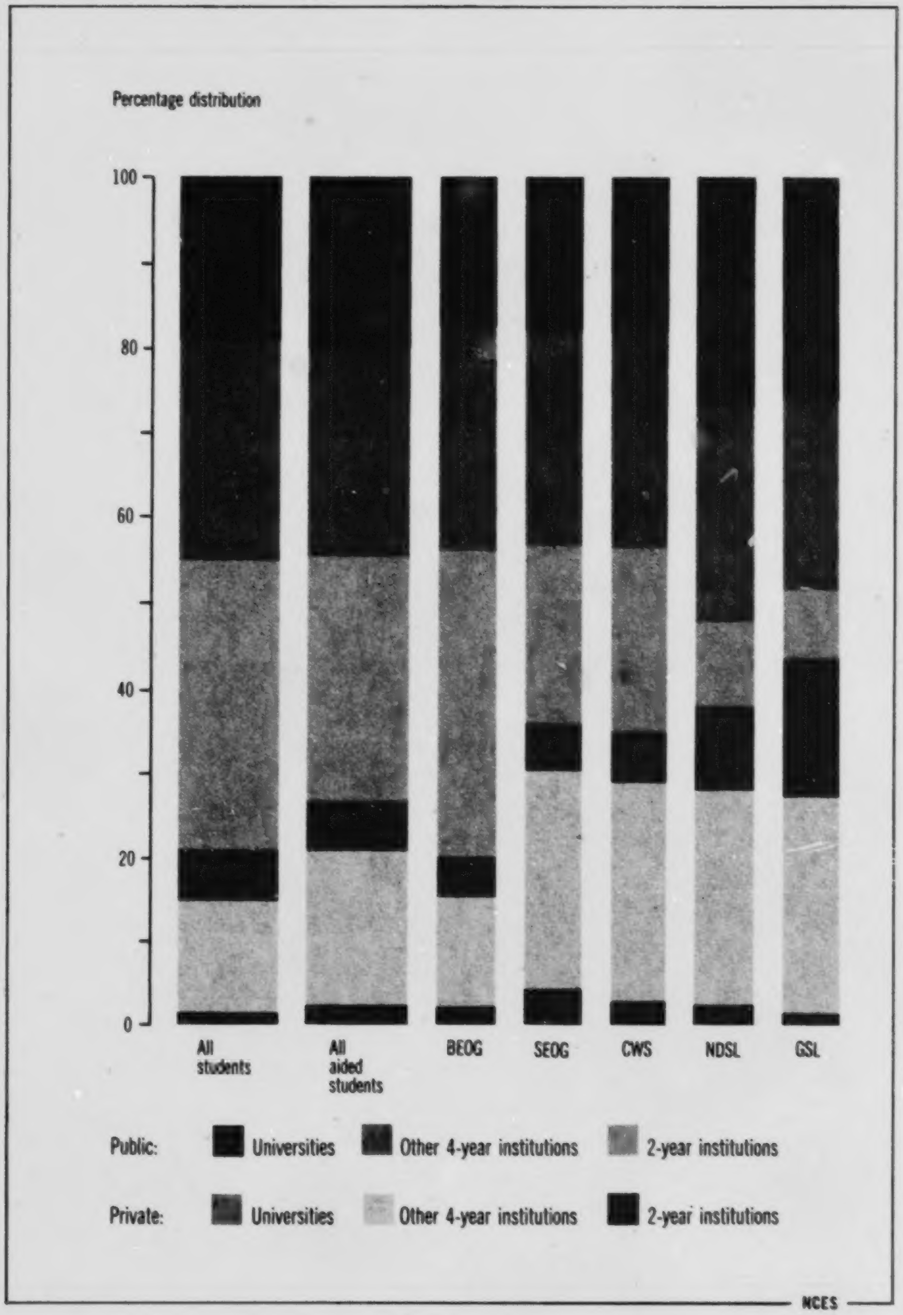

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Table 5.6a
Estimated percentage distribution of Federal tax expenditures,[1] by income category: Fiscal year 1974

Individual income category	Total tax expenditures	Total education tax expenditures	Exclusion of scholarships & fellowships	Exclusion of GI Bill benefits	Deduction of contributions	Parental exemptions for students age 19 and over
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Less than $7,000	**9.0**	**23.9**	**47.6**	**75.2**	**0.3**	**7.0**
$7,000-$10,000	**7.6**	**11.9**	**21.0**	**12.1**	**0.6**	**15.3**
$10,000-$15,000	**15.3**	**17.5**	**15.9**	**5.5**	**0.9**	**32.4**
$15,000-$20,000	**15.3**	**11.9**	**9.7**	**3.5**	**5.6**	**19.7**
Over $20,000	**53.0**	**34.8**	**5.6**	**3.8**	**92.6**	**25.7**
Total tax expenditures (in millions)	$58,175	$1,495	$195	$290	$355	$655

[1] Federal tax expenditures are revenue losses attributable to Federal tax provisions which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.

NOTE: Details may not add to totals because of rounding.

SOURCE: *Congressional Record*, June 2, 1975, S9174-5.

Table 5.6b
Estimated Federal tax expenditures for higher education, by function: Fiscal years 1974 to 1978

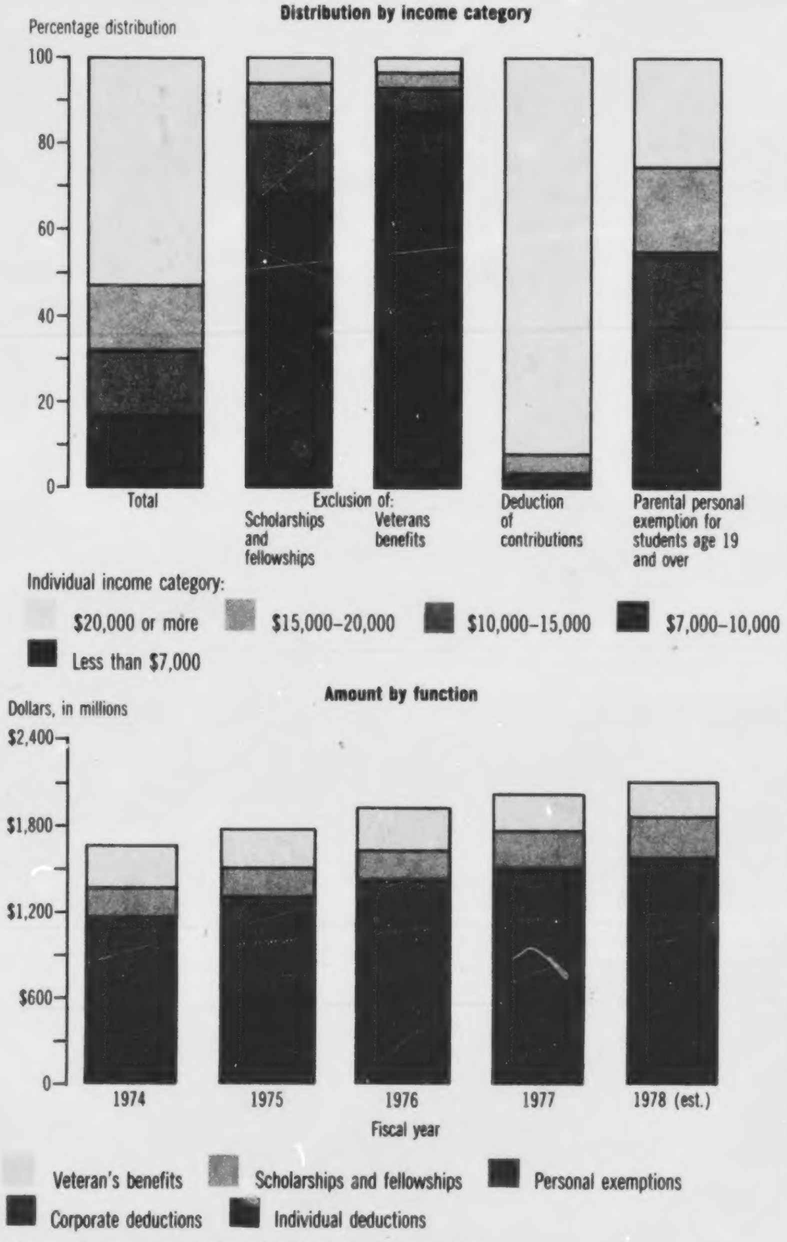
Item	Fiscal year 1974	1975	1976	1977	1978 [1]
	(In millions)				
TOTAL	**$1,650**	**$1,770**	**$1,920**	**$2,010**	**$2,100**
Veteran's readjustment benefits	**290**	**255**	**305**	**255**	**240**
Exclusion of scholarships and fellowships	**195**	**200**	**195**	**250**	**285**
Parental personal exemption for students age 19 and over	**655**	**670**	**720**	**750**	**770**
Deductibility of contributions to educational institutions by:					
Corporations	**155**	**205**	**190**	**215**	**240**
Individuals	**355**	**440**	**510**	**540**	**565**

[1] Estimated.

SOURCE: Executive Office of the President, Office of Management and Budget, *Special Analyses, Budget of United States Government*, 1976, 1977, and 1978; and Congressional Budget Office, Five-year Budget Projections, Fiscal years 1978-82.

Chart 5.6
Federal Tax Expenditures* for Education

Most Federal tax expenditures for education occur through personal exemptions taken by parents of students aged 19 and over. Over 50 percent of the Federal tax expenditures occurring through this provision are made by parents earning not more than $15,000 a year.



*Federal tax expenditures are revenue losses attributable to Federal tax provisions.

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Table 5.7
Estimated voluntary support of higher education, by source: 1967 to 1976

Source	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
	Academic year ending									
	(Amount in millions)									
TOTAL	**$1,270**	**$1,372**	**$1,461**	**$1,472**	**$1,504**	**$1,647**	**$1,751**	**$1,747**	**$1,675**	**$1,891**
Foundations	**290**	**321**	**352**	**359**	**341**	**427**	**410**	**417**	**385**	**431**
Non-alumni individuals	**320**	**349**	**366**	**366**	**390**	**401**	**469**	**433**	**400**	**447**
Alumni individuals	**278**	**307**	**353**	**314**	**373**	**392**	**418**	**397**	**377**	**461**
Business corporations	**213**	**214**	**221**	**222**	**211**	**223**	**250**	**276**	**276**	**298**
Religious denominations	**92**	**102**	**81**	**83**	**85**	**82**	**78**	**91**	**88**	**102**
Other	**78**	**78**	**88**	**127**	**104**	**121**	**126**	**133**	**149**	**153**
	Percentage distribution									
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Foundations	22.8	23.4	24.1	24.4	22.5	25.9	23.4	23.9	23.0	22.8
Non-alumni individuals	25.2	25.5	25.1	24.8	26.6	24.4	26.8	24.8	23.9	23.6
Alumni individuals	21.9	22.4	24.1	21.3	24.6	23.8	23.9	22.7	22.5	24.4
Business corporations	16.8	15.6	15.1	15.1	13.9	13.6	14.2	15.8	16.5	15.7
Religious denominations	7.2	7.4	5.6	5.7	5.6	5.0	4.5	5.2	5.2	5.4
Other	6.1	5.7	6.0	8.7	6.8	7.3	7.2	7.6	8.9	8.1

NOTE: Details may not add to totals because of rounding.

SOURCE: Council for Financial Aid to Education, *Voluntary Support of Education 1975–1976.*

Chart 5.7
Voluntary Support of Higher Education

Voluntary support of higher education was at its highest level ever in 1975–76, $1,891 million. The largest share, about 24 percent, came from alumni.

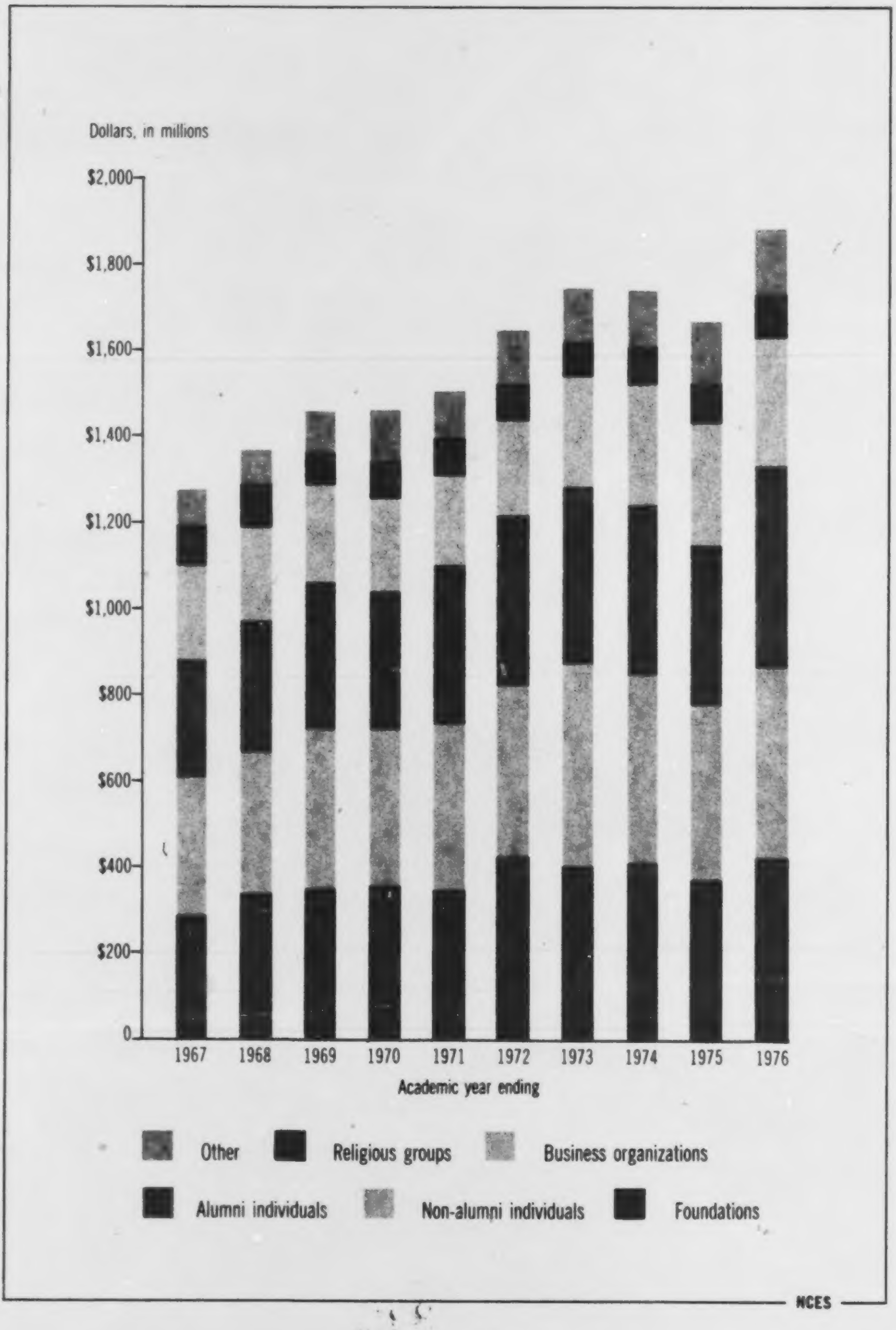

Table 5.8
Expenditures for research and development by universities and colleges, by source: 1968–1977

Source	1968	1969	1970	1971	1972	1973	1974	1975	1976[1]	1977[1]
					(Amount in millions)					
Total.	**$2,149**	**$2,220**	**$2,335**	**$2,500**	**$2,676**	**$2,940**	**$3,017**	**$3,393**	**$3,660**	**$3,956**
Federal government	**1,573**	**1,595**	**1,648**	**1,724**	**1,839**	**2,038**	**2,032**	**2,285**	**2,450**	**2,634**
Industry	**55**	**60**	**61**	**70**	**75**	**85**	**96**	**112**	**123**	**134**
Universities and colleges	**390**	**420**	**461**	**529**	**575**	**615**	**671**	**741**	**808**	**883**
Other nonprofit institutions	**131**	**145**	**165**	**177**	**187**	**202**	**218**	**255**	**279**	**305**
					Percentage distribution					
Total.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal government	73.2	71.8	70.6	69.0	68.7	69.3	67.4	67.3	66.9	66.6
Industry	2.6	2.7	2.6	2.8	2.8	2.9	3.2	3.3	3.4	3.4
Universities and colleges	18.1	18.9	19.7	21.2	21.5	20.9	22.2	21.8	22.1	22.3
Other nonprofit institutions	6.1	6.5	7.1	7.1	7.0	6.9	7.2	7.5	7.6	7.7

[1] Estimated.

SOURCE: National Science Foundation, *National Patterns of R&D Resources, Funds and Manpower in the United States, 1953–1977.*

Chart 5.8
Universities and Colleges' Expenditures for Research and Development by Source

The share of the expenditures for research and development by universities and colleges coming from the Federal Government has declined from about 73 percent in 1968 to about 67 percent in 1977.

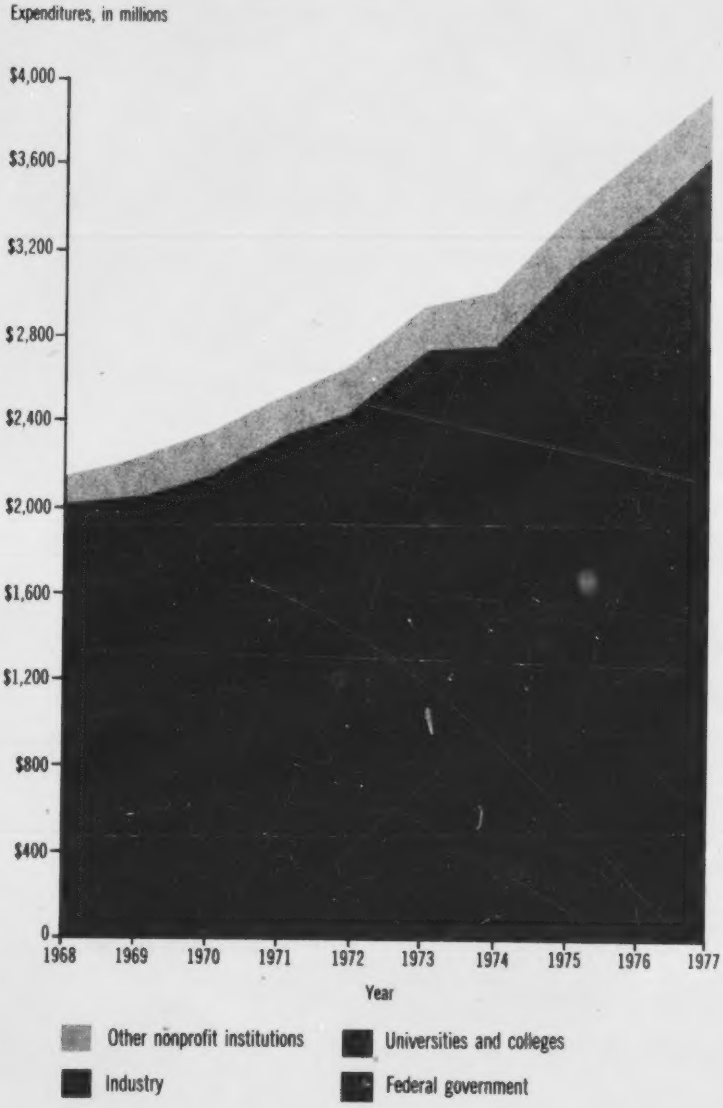

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Table 5.9
Higher education price indexes and Consumer Price Index (CPI): Fiscal years, 1971 to 1977

Price index	Fiscal year 1971	1972	1973	1974	1975	1976	1977[1]
	(1967=100)						
Consumer Price Index (CPI)	119.0	123.3	128.2	139.7	155.2	166.2	175.8
Higher Education Price Index (HEPI) .	128.6	135.8	143.0	153.1	166.2	177.2	188.6
Selected HEPI component indexes:							
Faculty Salary Index[2]	127.2	131.7	137.4	144.4	152.3	161.1	168.7
Faculty Fringe Benefits Index	162.0	180.2	197.7	222.0	241.0	266.7	295.0
Total Book and Periodical Index . . .	144.8	163.8	177.0	195.3	219.5	251.8	267.7
Utilities Index[3]	114.6	122.4	129.0	158.3	202.9	219.1	258.1

[1] Based on assumption that 1977 rate of inflation is the same as that of 1976.
[2] Based on average salary for full-time faculty in all institutions based on standard 9-month academic year.
[3] Includes natural gas, commercial power, residual fuels (heating oil), and water and sewerage.

SOURCE: U.S. Department of Health, Education, and Welfare, National Institute of Education, *Higher Education Prices and Price Indexes: 1977 Supplement*, D. Kent Halstead.

Chart 5.9
Price Indexes for Higher Education

Since 1967, prices for the goods and services typically purchased by institutions of higher education have increased more than those purchased by the general consumer.

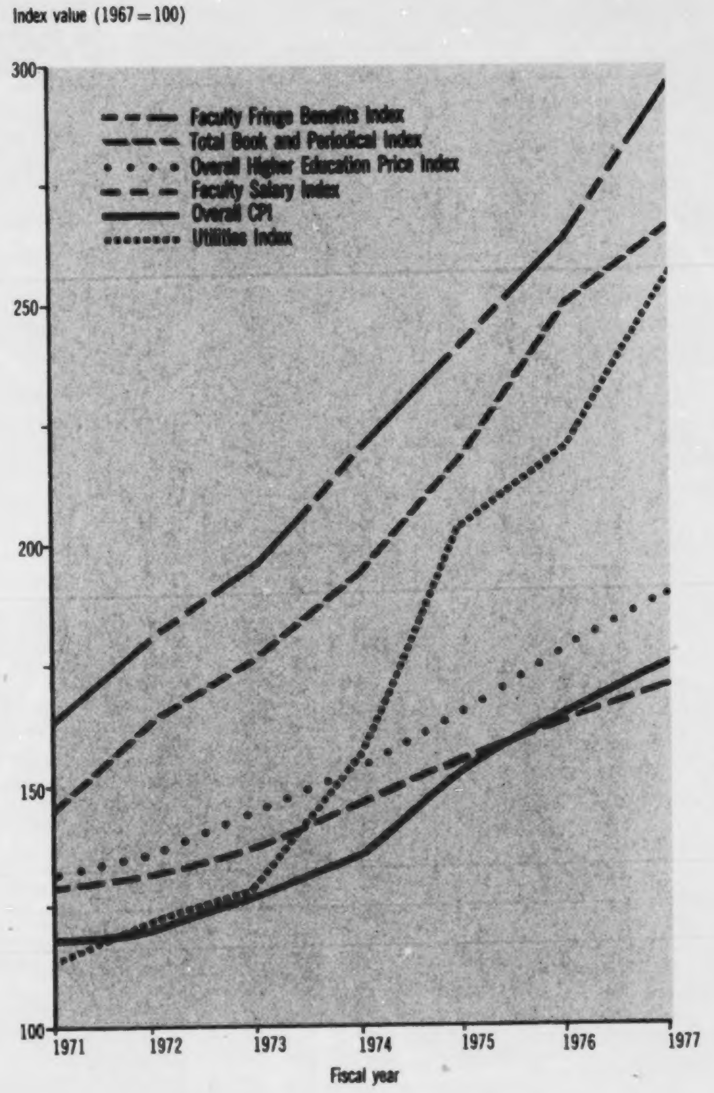

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Table 5.10
"Student education" expenditures per full-time-equivalent student by institutions of higher education, by control: Fiscal years 1967 to 1977

Control of institution	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
	(Constant 1976–77 dollars)										
All institutions	$2,650	$2,837	$2,985	$3,068	$3,106	$3,165	$3,254	$3,243	$3,108	$2,980	$3,040
Public	2,407	2,623	2,712	2,796	2,834	2,881	2,963	2,972	2,863	2,744	2,804
Private	3,146	3,305	3,653	3,774	3,859	3,994	4,135	4,079	3,844	3,767	3,805

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986–87* and unpublished data.

Chart 5.10
"Student Education" Expenditures per Student by Institutions of Higher Education

Since 1967, the relative increases in "student education" expenditures per full-time student have been greater at private than at public institutions.

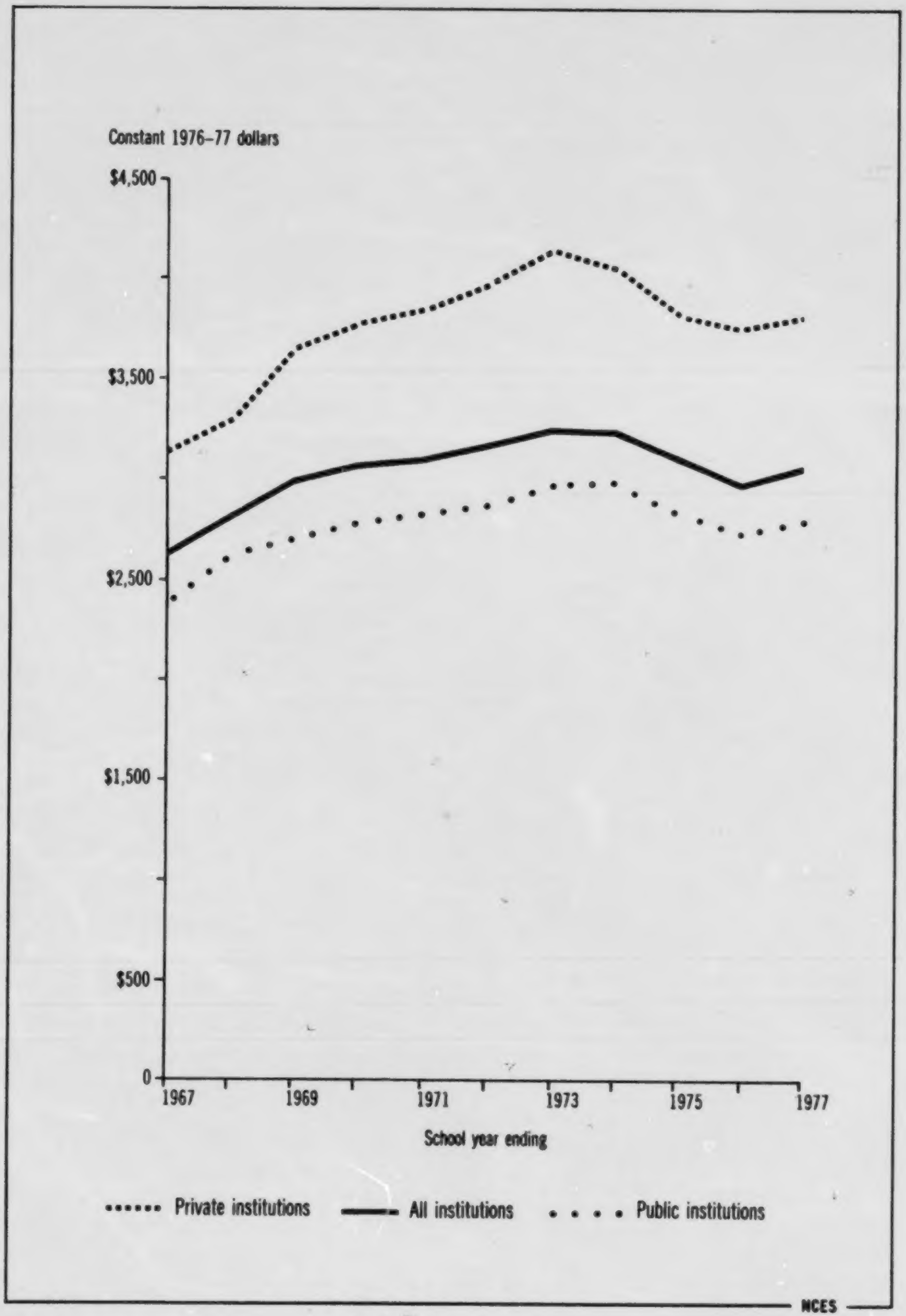

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Table 5.11
Total educational expenses of full-time college students [1] by ability level, racial/ethnic group, sex, and socioeconomic status and level of institution: 1972–73 to 1975–76

Year and level of institution	All students	Ability			Racial/ethnic group				Sex		Socioeconomic status		
		Low	Middle	High	White	Black	Hispanic	Other	Male	Female	Low	Middle	High
1972–73:													
All levels	**$1,794**	**$1,218**	**$1,525**	**$2,148**	**$1,828**	**$1,632**	**$1,154**	**$1,726**	**$1,771**	**$1,818**	**$1,425**	**$1,584**	**$2,159**
4-year	2,205	1,631	1,973	2,412	2,240	1,869	1,778	2,232	2,203	2,208	1,809	1,990	2,517
2-year	880	856	862	922	901	879	544	783	852	914	787	876	939
1973–74:													
All levels	2,198	1,527	1,959	2,467	2,233	1,956	1,424	2,307	2,211	2,179	1,821	1,995	2,494
4-year	2,513	1,825	2,294	2,685	2,538	2,193	1,927	2,747	2,531	2,486	2,125	2,315	2,758
2-year	1,317	1,222	1,349	1,319	1,362	1,170	904	1,212	1,351	1,289	1,217	1,292	1,418
1974–75:													
All levels	2,657	1,960	2,388	2,937	2,710	2,398	2,127	2,340	2,713	2,590	2,296	2,478	2,908
4-year	2,819	2,297	2,543	3,027	2,854	2,580	2,683	2,542	2,886	2,742	2,471	2,648	3,041
2-year	1,654	1,274	1,699	1,746	1,704	1,444	1,259	1,725	1,733	1,541	1,619	1,590	1,736
1975–76:													
All levels	**2,793**	**2,263**	**2,547**	**3,046**	**2,842**	**2,310**	**2,630**	**2,788**	**2,890**	**2,682**	**2,361**	**2,653**	**3,031**
4-year	2,887	2,420	2,649	3,075	2,921	2,494	2,897	2,839	2,991	2,767	2,464	2,753	3,096
2-year	1,934	1,819	1,824	2,356	1,967	1,465	1,999	2,523	1,977	1,889	1,908	1,873	2,057

[1] In the National Longitudinal Study of the High School Class of 1972.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished data.

Chart 5.11
Higher Education Expenses of the High School Class of 1972 in 1972-73 and in 1975-76

Education expenses of students vary according to their characteristics. Students who are white, of high ability, or of high socioeconomic status spend more than do other students.

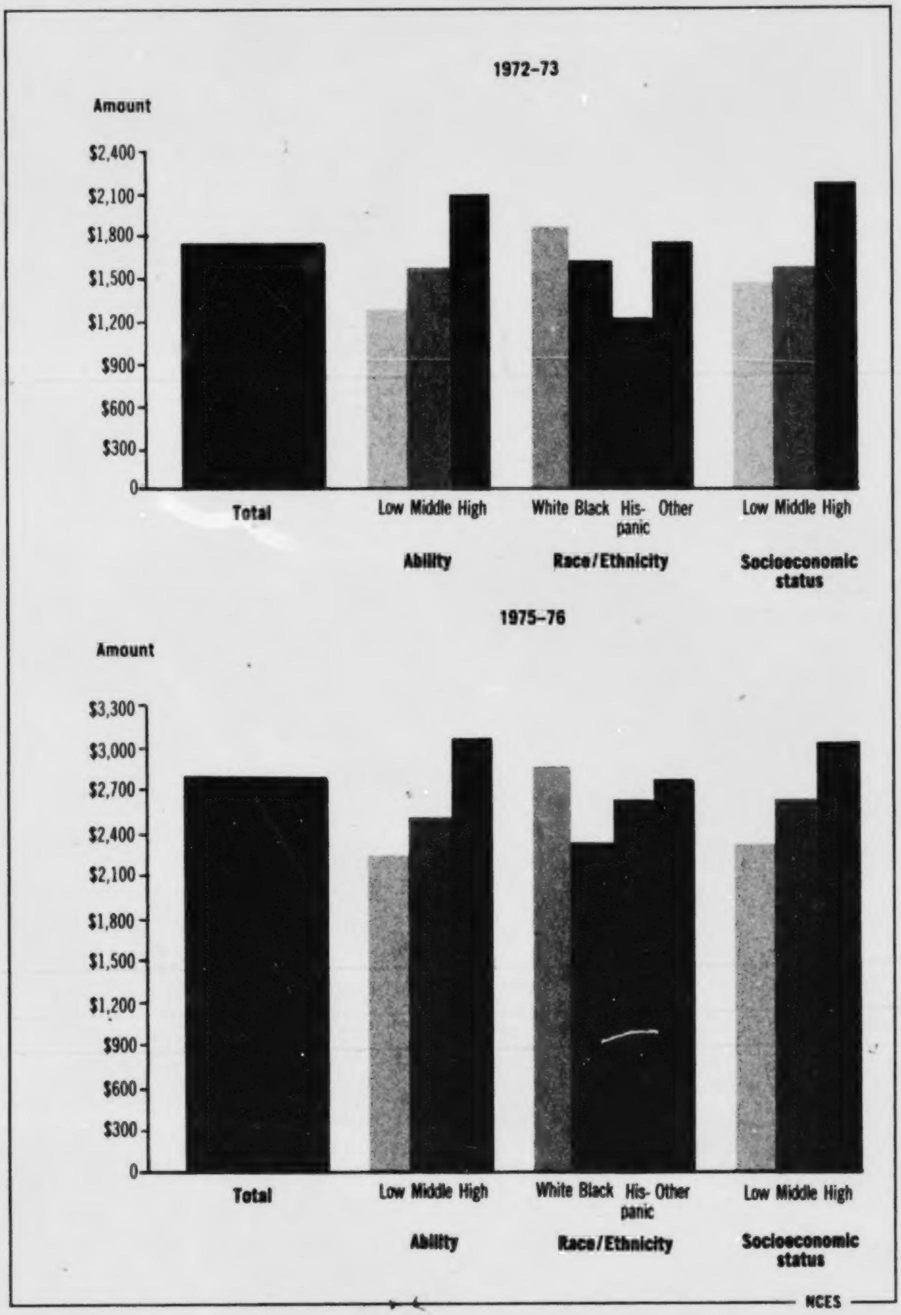

Table 5.12
Percentage distribution of average student expenditures [1] for postsecondary education, by source, family income, student ability, ethnicity, and by sex: 1972–73

Source	Family income quartile				Student ability group				Ethnicity				Sex	
	Low	Lower middle	Upper middle	High	Low	Lower middle	Upper middle	High	White	Black	Hispanic	Other	Male	Female
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Grant and transfer	30	19	13	7	13	14	14	18	13	25	28	21	15	14
Parents' contribution	31	41	50	70	52	54	56	54	55	38	40	48	51	56
Student term-time earnings	8	6	5	2	6	4	4	3	5	9	6	7	5	4
Student loan	14	12	10	4	8	10	8	8	8	14	12	7	7	10
Student savings	18	22	21	16	21	18	18	17	19	14	14	17	22	16

[1] For full-time students in the National Longitudinal Study of the High School Class of 1972.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Student Financial Aid: Institutional Packaging and Family Expenditure Patterns," Alan P. Wagner and Lois D. Rice.

Chart 5.12
Distribution of Student Expenditures for Postsecondary Education by Source

The shares of students' expenditures coming from different sources vary according to students' characteristics. Students who are black, Hispanic, or whose family income is low receive proportionately more financial support in the form of grants and transfers.

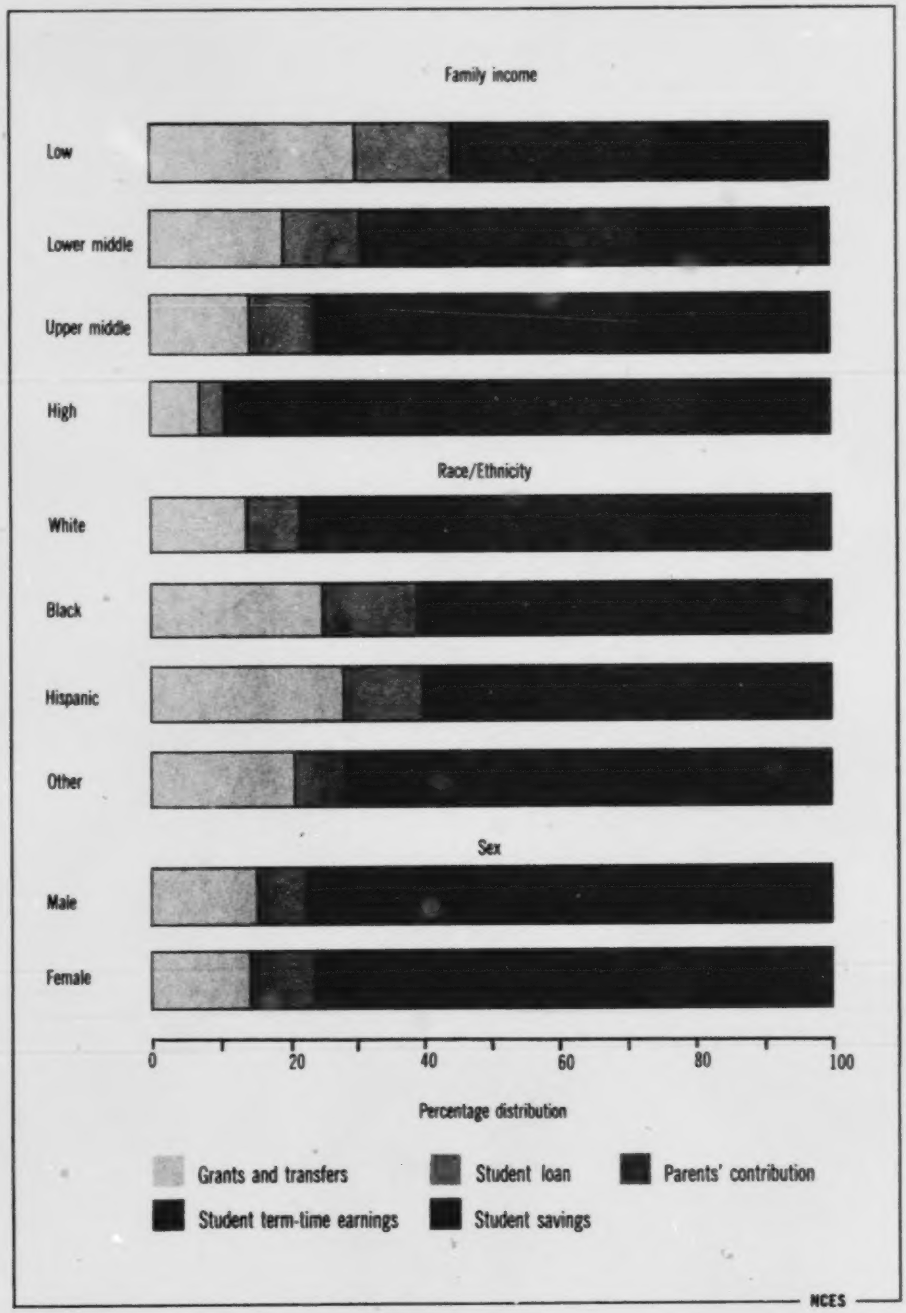

Table 5.13
Median family income by racial/ethnic group, and student charges by type and control of institution: 1967 to 1976

Item	Academic year beginning									
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Median income of:										
All families	$7,933	$8,632	$9,433	$9,867	$10,285	$11,116	$12,051	$12,902	$13,719	$14,958
White families	8,234	8,937	9,794	10,236	10,672	11,549	12,595	13,408	14,268	15,537
Black families	4,875	5,360	5,999	6,279	6,440	6,864	7,269	8,005	8,779	9,242
Families with head of Spanish origin	([1])	([1])	([1])	([1])	([1])	8,183	8,715	9,540	9,551	10,259
Total tuition, board and room charges:[2]										
University:										
Public	$1,199	$1,245	$1,362	$1,477	$1,579	$1,668	$1,707	$1,797	$1,937	$2,073
Private	2,545	2,673	2,920	3,163	3,375	3,512	3,717	3,962	4,344	4,849
Other 4-year:										
Public	997	1,063	1,135	1,206	1,263	1,460	1,506	1,579	1,684	1,854
Private	2,104	2,237	2,420	2,599	2,748	2,934	3,040	3,227	3,474	3,775
2-year:										
Public	789	883	951	1,018	1,073	1,197	1,274	1,381	1,482	1,603
Private	1,762	1,876	1,993	2,103	2,186	2,273	2,410	2,504	2,770	3,004
Total tuition, board and room charges as percent of median income of all families for:										
University:										
Public	15.1	14.4	14.4	15.0	15.4	15.0	14.2	13.9	14.1	13.9
Private	32.1	31.0	30.9	32.0	32.8	31.6	30.8	30.7	31.7	32.4
Other 4-year:										
Public	12.6	12.3	12.0	12.2	12.3	13.1	12.5	12.2	12.3	12.4
Private	26.5	25.9	25.7	26.3	26.7	26.4	25.2	25.0	25.3	25.2
2-year:										
Public	9.9	10.2	10.1	10.3	10.4	10.8	10.6	10.7	10.8	10.7
Private	22.2	21.7	21.1	21.3	21.3	20.4	20.0	19.4	20.2	20.1

[1] Not available.

[2] Estimated average charge per full-time undergraduate resident degree-credit student for academic year beginning in fall of the year indicated.

SOURCES: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, Nos. 105 and 107 and U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Projections of Education Statistics to 1986—87*, forthcoming.

Chart 5.13
Student Charges as a Percent of Median Family Income

Student charges for tuition, board, and room at institutions of higher education as a percentage of median family income have varied little since 1967.

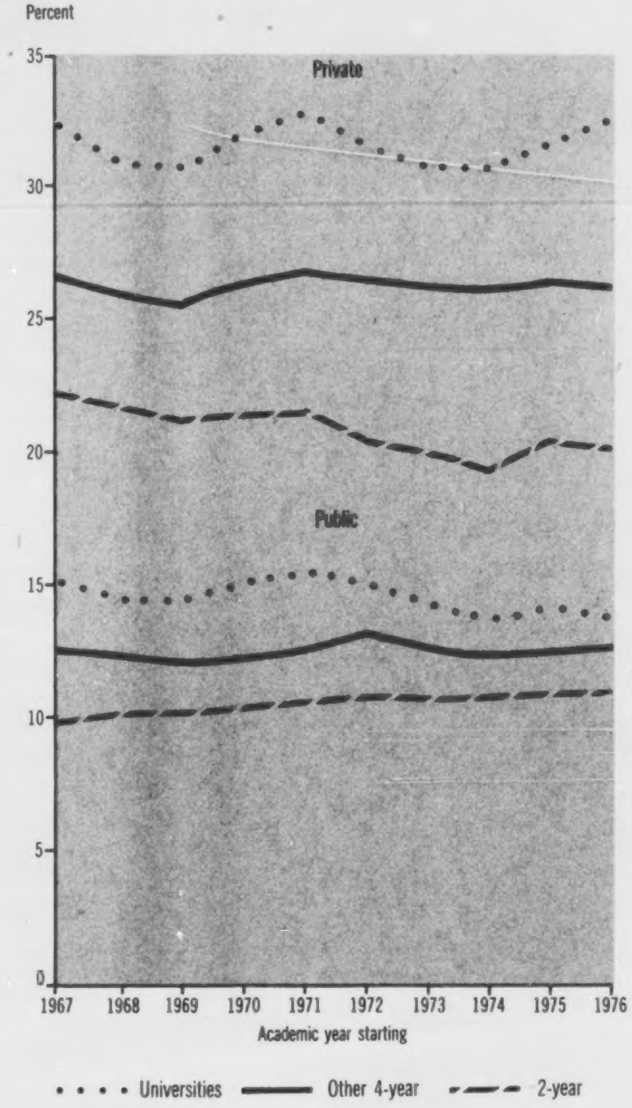

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Table 5.14
Estimated percent of families with an 18-year-old child and at least one other child 18 to 21 years old, by race and education of head of household: 1965 to 1985

Year [1]	Families with an 18-year-old child (in thousands)	Percent of families with an 18-year-old child and at least one other child 18 to 21 years old						
		Total	Race		Education of head of household			
			White [2]	Black	Not a high school graduate	High school graduate	Some college	4 or more years of college
1965	3,338	35.4	33.7	53.0	40.7	30.9	29.8	31.1
1966	3,366	35.4	33.9	49.5	41.0	30.0	31.5	35.1
1967	3,256	42.3	40.8	54.4	48.4	38.1	36.0	36.0
1968	3,279	46.0	44.5	57.3	50.9	43.0	40.7	40.0
1969	3,266	45.8	44.2	58.3	51.0	42.8	41.2	39.5
1970	3,393	45.2	43.4	60.0	50.3	42.1	41.0	41.1
1971	3,523	45.7	44.0	59.8	50.2	43.4	42.0	42.3
1972	3,615	47.0	45.4	59.8	51.8	43.8	45.1	44.2
1973	3,710	48.4	47.0	59.1	52.9	45.3	46.4	47.8
1974	3,692	49.4	47.7	62.1	53.4	46.9	47.7	47.9
1975	3,875	48.4	47.1	57.6	51.9	46.8	47.0	45.5
1976	3,980	49.6	48.2	59.3	52.8	48.3	47.4	48.5
1977	3,933	51.1	49.7	60.5	55.0	49.4	48.9	49.8
1978	4,028	51.5	50.3	59.2	55.1	50.4	48.8	49.1
1979	3,942	51.8	50.7	59.6	55.5	50.5	50.2	49.3
1980	3,866	51.5	50.4	59.3	55.4	50.1	49.9	49.7
1981	3,818	51.4	50.1	60.0	55.8	50.1	48.4	49.3
1982	3,776	50.4	49.3	58.3	54.7	49.6	47.2	48.9
1983	3,582	49.2	48.0	57.7	55.0	47.4	46.3	47.6
1984	3,343	47.4	46.1	55.5	53.0	45.7	44.7	46.1
1985	3,148	44.2	42.9	53.4	50.6	43.0	40.9	40.9

[1] Estimates for years 1965–1974 are based on data from the 1960 U.S. Census of Population; estimates for years 1975–1985 are based on data from the 1970 U.S. Census of Population.

[2] Non-black families.

SOURCE: U.S. Department of Health, Education, and Welfare, Assistant Secretary for Planning and Evaluation and National Center for Education Statistics, based on the 1960 and 1970 U.S. Censuses of Population.

Chart 5.14
Families With an 18-Year-Old Child and at Least One Other Child 18 to 21 Years Old

The proportion of families with an 18-year-old child having at least one other child 18 to 21 years old has been increasing in recent years, exceeding 50 percent in 1977.

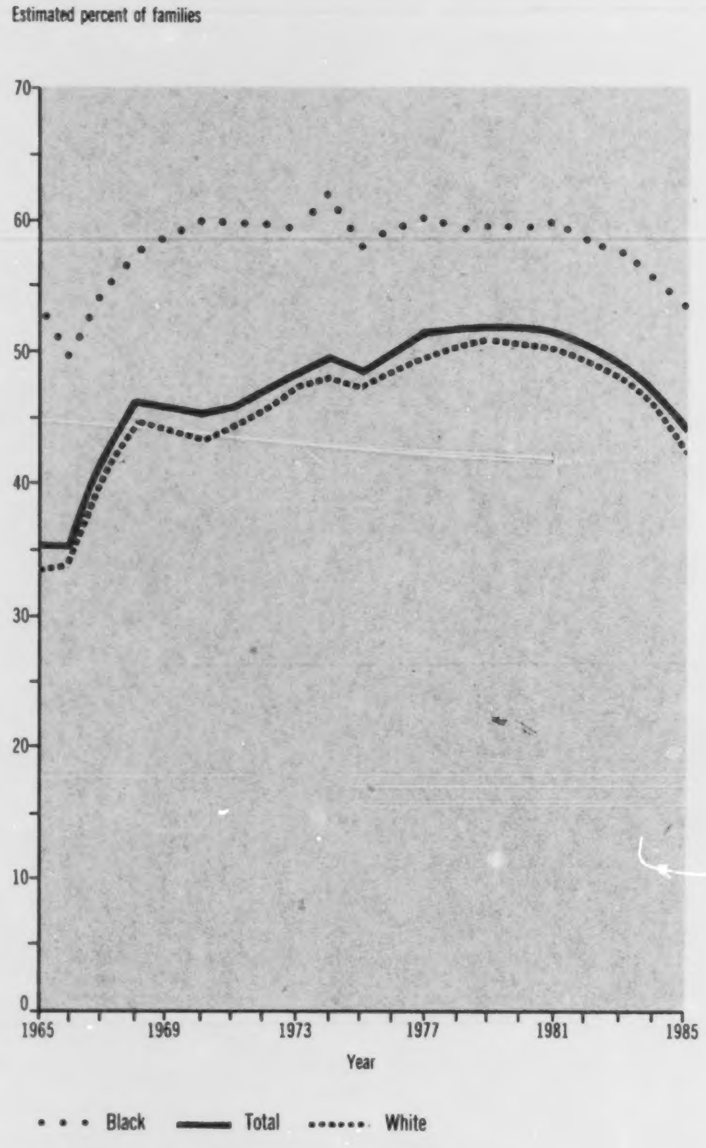

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Table 5.15
Percent of freshmen receiving financial aid, by type of aid: Fall 1977

Type of aid	All freshmen
Parental aid	79.8
Basic Educational Opportunity Grant (BEOG)	32.7
Supplemental Educational Opportunity Grant (SEOG)	9.2
College Work-Study (CWS)	15.9
State grant	21.2
College grant	16.8
Private grant	10.4
Federally Insured Student Loan (FISL)	13.1
National Direct Student Loan (NDSL)	10.7
College loan	5.4
Other loan	6.6
Personal G.I. Benefits	1.5
Parent's G.I. Benefits	2.0
Social Security Benefits	9.2

SOURCE: American Council on Education, Cooperative Institutional Research Program, *The American Freshman: National Norms for Fall 1977.*

Chart 5.15
Freshman Financial Aid Recipients by Type of Aid

More freshmen receive financial aid from the OE's BEOG program than from any other source except their parents.

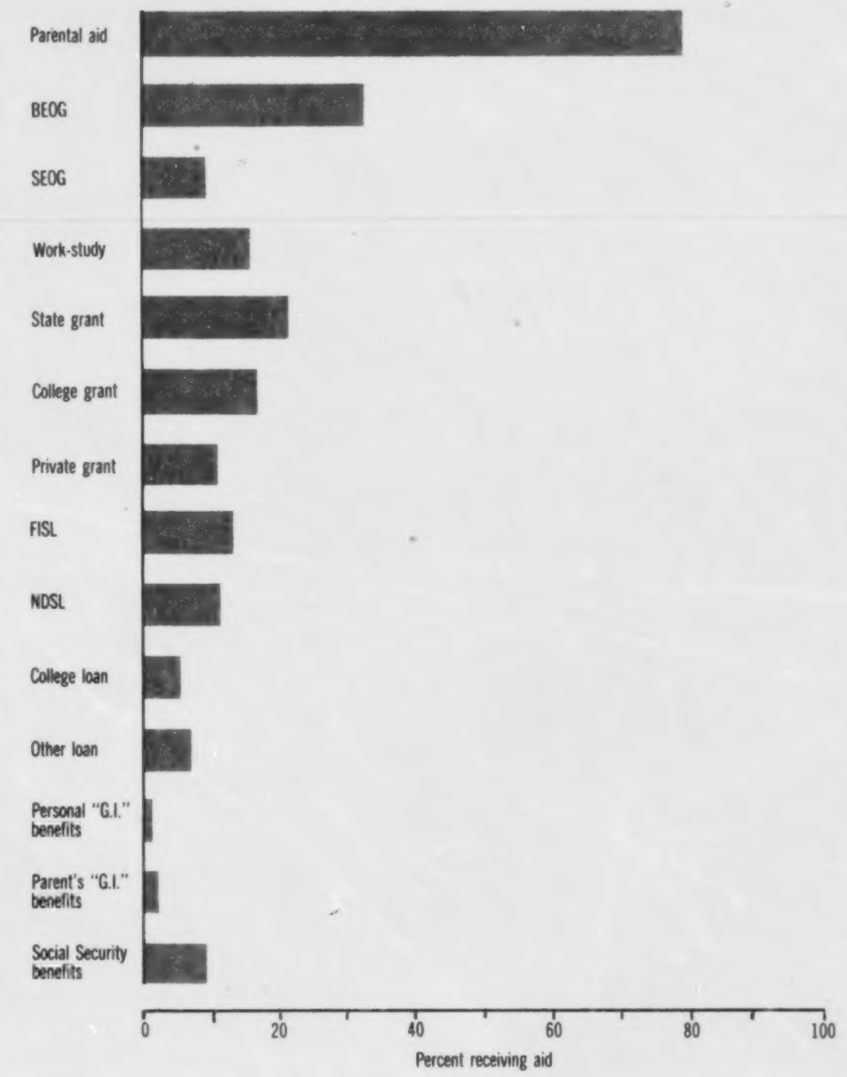

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Table 5.16
Percent of entering full-time freshmen receiving financial aid, type of aid and selected student characteristics: 1972–73

Student characteristic	Percent of total full-time freshmen receiving:				
	Aid from any source	Grants or scholarships	Term-time earnings	Loans	Benefits
All students	**55.7**	**33.7**	**23.3**	**21.1**	**5.1**
Family income:					
Low	**76.7**	52.4	30.6	34.6	11.6
Lower middle	**67.7**	42.2	27.9	28.3	5.5
Upper middle	**55.4**	32.5	23.4	20.5	3.8
High	**34.9**	17.6	15.5	8.6	1.9
Racial/ethnic group:					
Black	**69.6**	41.5	32.2	37.3	6.3
Hispanic	**68.6**	42.9	26.5	28.5	7.4
White	**52.2**	31.1	21.4	18.8	5.0
Other	**58.2**	38.3	26.7	18.5	2.2
Achievement/ability:					
Low	**52.8**	25.6	24.5	19.0	5.9
Lower middle	**52.5**	31.2	20.6	22.1	5.1
Upper middle	**52.2**	36.3	20.2	19.9	4.3
High	**61.6**	46.7	21.9	22.7	3.4
Institution attended:					
Public—4-year	55.4	36.2	20.4	20.6	4.9
Public—2-year	48.2	22.5	27.1	7.3	6.5
Private—4-year	64.3	48.3	26.6	34.7	3.8
Private—2-year	54.9	37.8	12.2	19.9	5.9

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Student Financial Aid: Institutional Packaging and Family Expenditure Patterns," Alan P. Wagner and Lois D. Rice, unpublished, using data from National Longitudinal Survey of High School Class of 1972.

Chart 5.16
Freshmen Receiving Financial Aid in 1972-1973

About 56 percent of all students received some form of nonparental financial assistance in 1972-73.

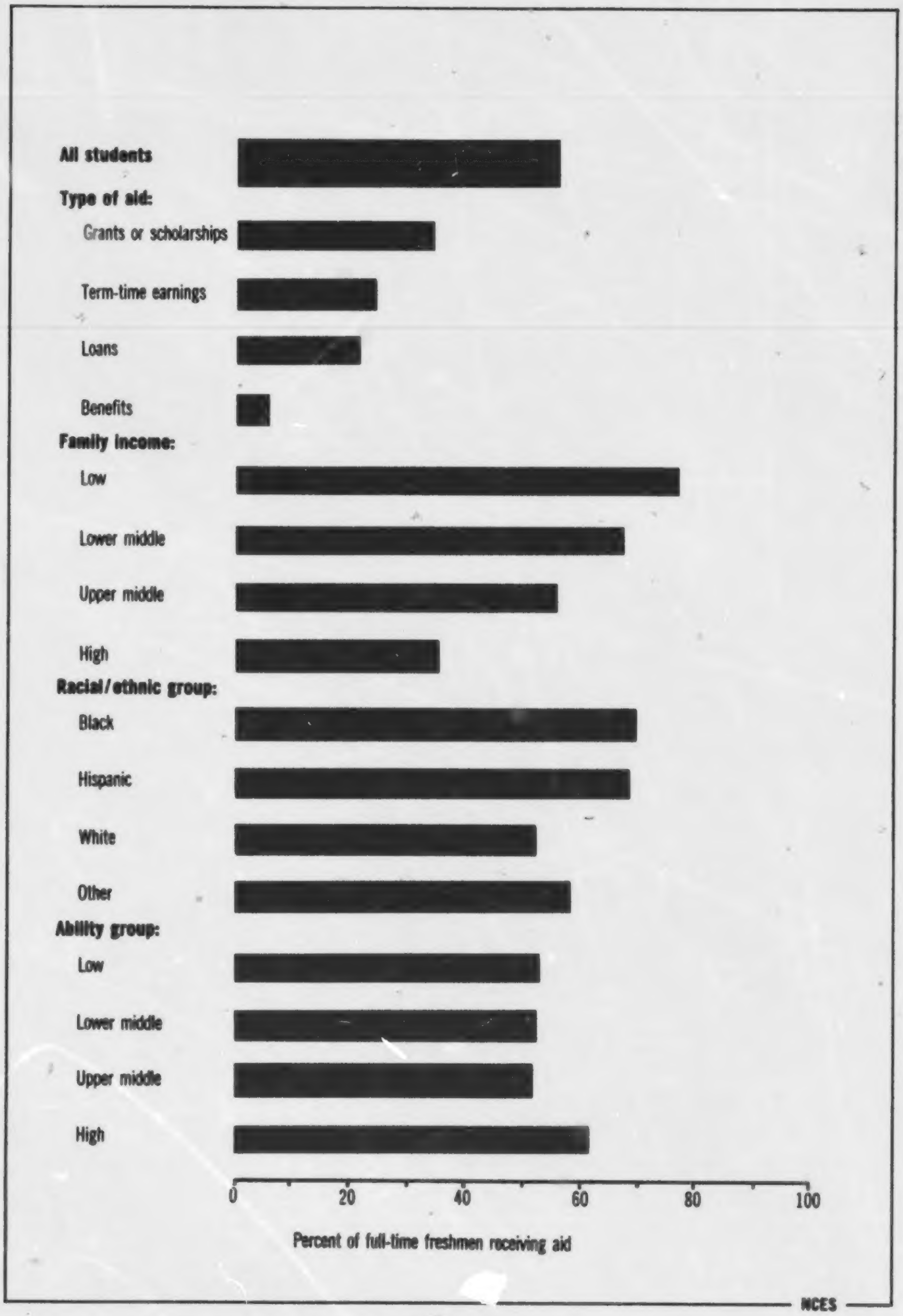

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Table 5.17
Composition of financial aid packages received by aided, entering full-time freshmen* by family income, student ability, racial/ethnic group, and control and type of institution attended: 1972–1973

Item	Amount							Percentage distribution						
		Federal aid					Non-Federal aid		Federal aid					Non-Federal aid
	Total	Total	Grants	College work-study	Loan	Benefit		Total	Total	Grant	College work-study	Loan	Benefit	
All aided freshmen . . .	$1,084	$565	$104	$76	$304	$81	$519	100.0	52.1	9.6	7.0	28.0	7.5	47.9
Family income quartile:														
Low	1,207	777	198	128	333	118	490	100.0	61.3	15.6	10.1	26.3	9.3	38.7
Lower middle	1,083	556	94	77	326	59	527	100.0	51.3	8.7	7.1	30.1	5.4	48.7
Upper middle	1,052	516	51	60	341	64	536	100.0	49.0	4.8	5.7	32.4	6.1	51.0
High	945	401	82	37	221	61	544	100.0	42.4	8.7	3.9	23.4	6.5	57.6
Student ability group:														
Low	962	586	109	97	286	94	376	100.0	60.9	11.3	10.1	29.7	9.8	39.1
Lower middle	1,099	584	92	70	346	66	525	100.0	52.2	8.4	6.4	31.5	6.0	47.8
Upper middle	1,150	558	99	61	316	82	592	100.0	48.5	8.6	5.3	27.5	7.1	51.5
High	1,288	507	112	50	287	58	781	100.0	39.4	8.7	3.9	22.3	4.5	60.6
Racial/ethnic group:														
White	1,052	533	88	65	294	86	519	100.0	50.7	8.4	6.2	27.9	8.2	49.3
Black	1,379	874	224	184	411	55	505	100.0	63.4	16.2	13.3	29.8	4.0	36.6
Hispanic	1,108	736	222	91	341	82	372	100.0	66.4	20.0	8.2	30.8	7.4	33.6
Other	1,272	518	143	99	259	17	754	100.0	40.7	11.2	7.8	20.4	1.3	59.3
Institution control and type:														
Public:														
4-year	956	522	118	70	264	70	434	100.0	54.6	12.3	7.3	27.6	7.3	45.4
2-year	618	338	65	77	108	88	280	100.0	54.7	10.5	12.5	17.5	14.2	45.3
Private:														
4-year	1,723	785	150	105	459	71	938	100.0	45.6	8.7	6.1	26.6	4.1	54.4
2-year	1,044	480	91	76	216	97	564	100.0	46.0	8.7	7.3	20.7	9.3	54.0

* In the National Longitudinal Study of the High School Class of 1972.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Student Financial Aid: Institutional Packaging and Family Expenditure Patterns," by Alan P. Wagner and Lois O. Rice.

Chart 5.17
Composition of Financial Aid Packages Received by 1972–73 Aided Entering Full-time Freshmen

In the financial aid packages received by all aided freshmen in 1972–73, over 50 percent of the financial aid came from Federal sources.

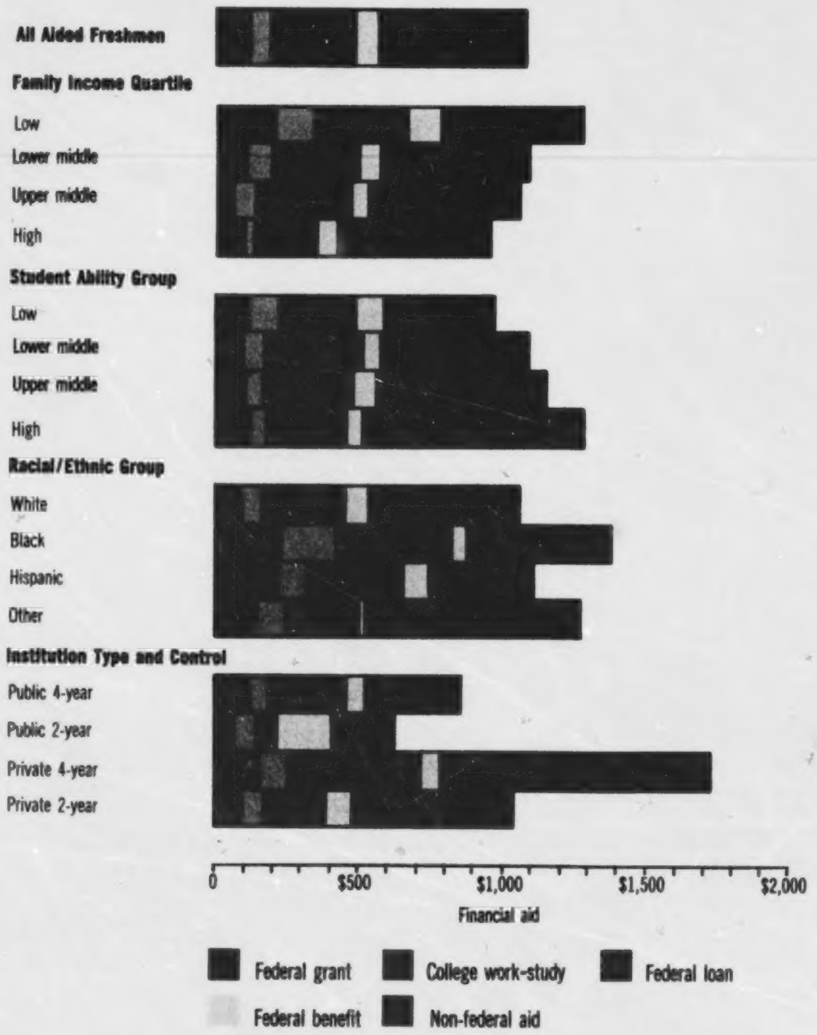

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Table 5.18
Federal expenditures for student support: Fiscal years 1968 to 1978

Program	Actual									Estimated	
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
	Amount in millions										
TOTAL	$1,455	$1,688	$2,128	$2,997	$3,375	$4,221	$4,391	$6,558	$8,178	$7,886	$6,704
Basic opportunity, work study, and supplementary grants	215	186	[1] 312	[1] 396	418	542	310	841	1,551	2,175	1,971
Student loans	209	231	[1] 298	[1] 349	515	493	575	599	567	598	15
Social Security (OASDI) grants	305	366	502	455	521	638	618	840	998	1,181	1,078
Veterans' readjustment	387	516	665	1,252	1,436	2,016	2,309	3,479	4,301	3,186	2,573
Other support	339	389	351	545	485	532	579	799	761	746	1,067
	Percentage distribution										
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic opportunity, work study, and supplementary grants	14.8	11.0	[1] 14.7	[1] 13.2	12.4	12.8	7.1	12.8	19.0	27.6	29.4
Student loans	14.4	13.7	[1] 14.0	[1] 11.7	15.2	11.7	13.1	9.1	6.9	7.6	0.2
Social Security (OASDI) grants	21.0	21.2	23.6	15.2	15.4	15.1	14.1	12.8	12.2	15.0	16.1
Veterans' readjustment	26.6	30.6	31.3	41.8	42.5	47.8	52.3	53.0	52.6	40.4	38.4
Other support	23.3	23.0	16.4	18.2	14.4	12.6	13.2	12.2	9.3	9.5	15.9

[1] Estimated.

NOTE: Details may not add to totals because of rounding.

SOURCE: Executive Office of the President, Office of Management and Budget, *Special Analysis, Budget of the United States*, fiscal years 1969 to 1978.

Chart 5.18
Federal Support for Students

The share of Federal support for students in the form of basic opportunity, work-study, and supplementary grants increased from about 15 percent in 1968 to an estimated 28 percent in 1977.

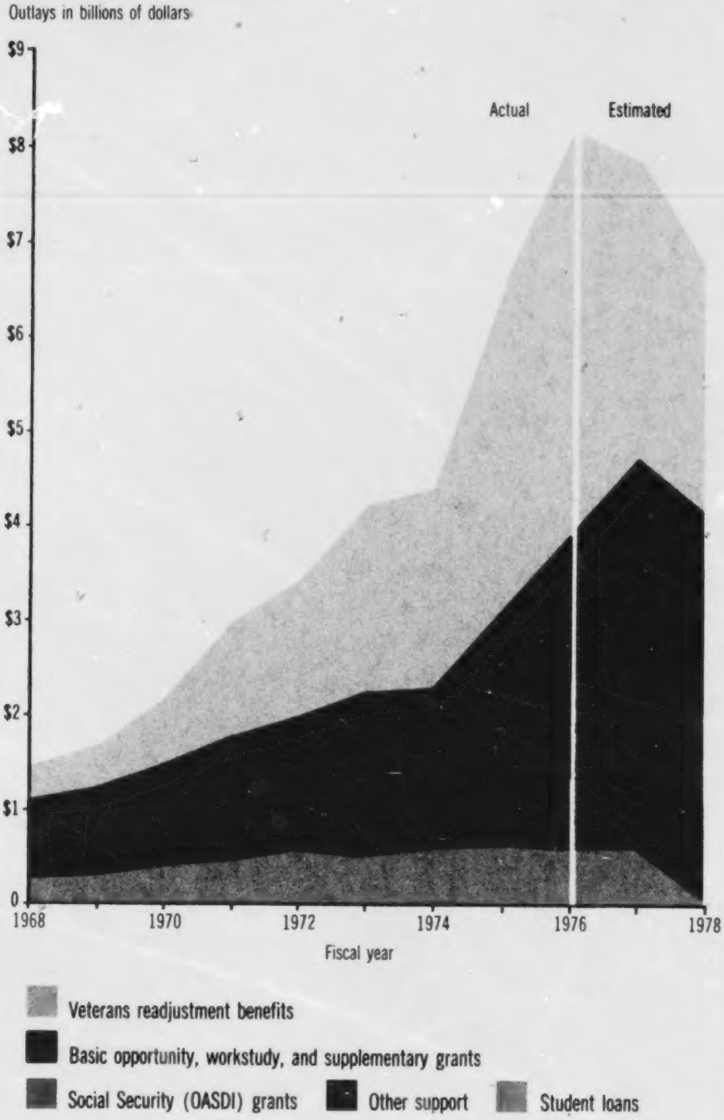

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Table 5.19
Percentage distribution of students receiving aid under Office of Education assistance programs,[1] by financial status: 1976–1977

Financial status	Total[2]	Program BEOG	SEOG	CWS	NDSL	GSL
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Dependent students by parental income:						
Less than $7,500	32.9	43.5	35.4	28.1	21.8	13.5
$7,500–$11,999	17.8	19.6	20.5	18.4	17.8	12.9
$12,000–$14,999	12.2	8.6	12.0	16.5	16.5	16.8
$15,000 and up	9.0	3.3	6.6	11.5	14.5	23.8
Independent students	28.0	24.9	25.6	25.5	29.4	33.0

[1] BEOG: Basic Educational Opportunity Grant Program; SEOG: Supplemental Educational Opportunity Grant Program; CWS: College Work-Study Program; NDSL: National Direct Student Loan Program; GSL: Guaranteed Student Loan Program.
[2] Unduplicated count; excludes Guaranteed Student Loan Program.

NOTE: Details may not add to totals because of rounding.

SOURCE: American Council on Education, Higher Education Panel, *Estimated Number of Student Aid Recipients, 1976–77.*

Chart 5.19
Recipients of Office of Education Student Assistance

Among all student recipients of OE financial aid in 1976–77, almost 33 percent reported parental income of less than $7,500.

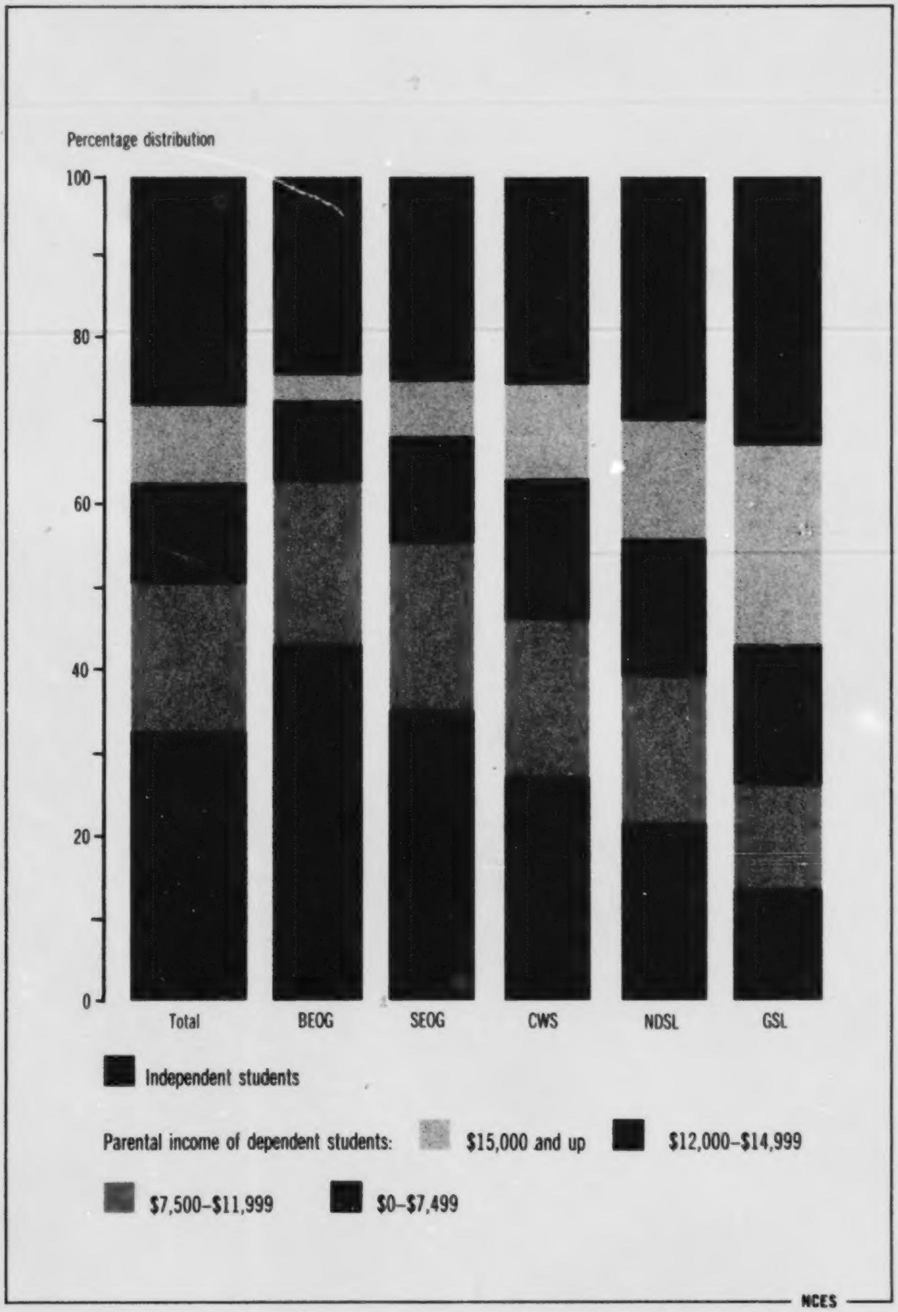

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Table 5.20a
Estimated distribution of student Social Security beneficiaries,[1] by income category: 1973

Family income category[2]	Percentage distribution: All student beneficiaries	Percentage distribution: All college student beneficiaries
TOTAL	100	**100**
Less than $8,000	46	**39**
$8,000–$9,999	12	**13**
$10,000–$14,999	22	**24**
$15,000 or more	20	**24**
Median income	$8,540	$9,690
Number (in thousands)	553	393

[1] Includes old-age, survivors, and disability insurance benefits.

[2] Includes total money income for calendar year 1972, including students' benefits and other social security benefits received by family.

SOURCE: U.S. Department of Health, Education, and Welfare, Social Security Administration, *Characteristics of Student OASDI Beneficiaries in 1973: An Overview.*

Table 5.20b
Estimated distribution of recipients[1] of Veterans' Educational Assistance,[2] by income category: 1975

Income category[3]	Percentage distribution of recipients
TOTAL	**100**
Less than $7,500	**49**
$7,500–$9,999	**23**
$10,000–$14,999	**23**
$15,000 or more	**6**
Number (in thousands)	1,197

[1] Includes veterans who are resident school trainees attending school at least one-half time. It is estimated that 88.6 percent are at college-level institutions.

[2] Commonly called "G.I. Bill" benefits.

[3] Includes total income of veteran and spouse.

SOURCE: Department of Health, Education, and Welfare, Veterans Administration, unpublished data.

Chart 5.20
Student Recipients of Social Security and "GI Bill" Benefits

Among student recipients of Social Security benefits in 1972, 54 percent reported family income of less than $10,000. Among student recipients of "GI Bill" benefits in 1975, 72 percent reported earnings of less than $10,000.

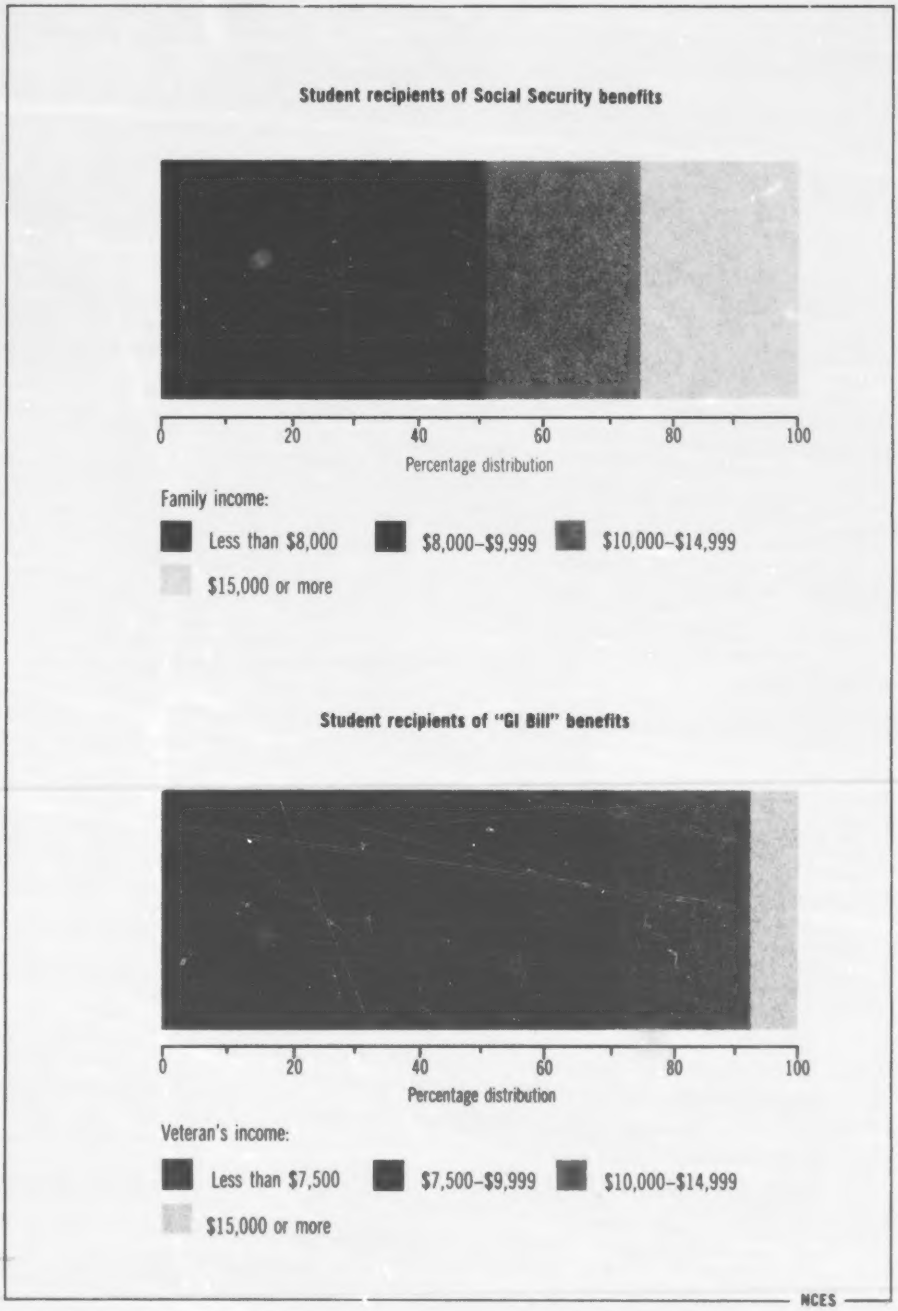


Table 5.21
Total cost of attending college,[1] by source of funds and parental income: Fall 1975

Cost of college tuition and fees [2]	Parental income													
	Total		$0–6,000		$6,001-10,000		$10,001-15,000		$15,001-20,000		$20,001-30,000		$30,000 or more	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Total														
Total cost [3]	$2,731	100.0	$2,369	100.0	$2,414	100.0	$2,459	100.0	$2,617	100.0	$2,902	100.0	$3,521	100.0
Grant aid [4]	513	18.8	1,205	50.9	962	39.0	580	23.6	388	14.8	253	8.7	141	4.0
Family resources [5]	1,524	55.8	525	22.2	733	30.4	1,115	45.3	1,459	55.8	1,990	68.6	2,920	82.9
Grant aid + family resources	2,037	74.6	1,730	73.0	1,695	70.2	1,695	68.9	1,847	70.6	2,243	77.3	3,061	86.9
Net Price [6]	694	25.4	639	27.0	719	29.8	764	31.1	770	29.4	659	22.7	460	13.1
$0–1,500														
Total cost [3]	2,353	100.0	2,123	100.0	2,143	100.0	2,164	100.0	2,294	100.0	2,527	100.0	2,938	100.0
Grant aid [4]	430	18.3	1,078	50.8	825	38.4	446	20.6	267	11.6	267	7.0	124	4.2
Family resources [5]	1,325	56.3	496	23.4	699	32.6	1,055	49.2	1,362	59.4	1,781	70.5	2,377	80.9
Grant aid + family resources	1,755	74.6	1,574	73.4	1,574	71.1	1,501	69.8	1,629	71.0	1,957	77.4	2,501	85.1
Net Price [6]	598	25.4	549	25.9	619	28.9	663	30.6	665	29.0	570	22.6	437	14.9
$1,501-2,000														
Total cost [3]	3,646	100.0	3,335	100.0	3,444	100.0	3,582	100.0	3,627	100.0	3,774	100.0	3,960	100.0
Grant aid [4]	889	24.4	1,779	53.3	1,540	44.7	1,128	31.5	796	21.9	410	10.9	188	4.7
Family resources [5]	1,718	47.1	564	16.9	763	22.6	1,217	34.0	1,618	44.6	2,300	60.9	3,247	82.0
Grant aid + family resources	2,607	71.5	2,343	70.3	2,303	67.3	2,345	65.5	2,414	66.6	2,710	71.8	3,435	86.7
Net Price [6]	1,039	28.5	994	29.8	1,140	33.1	1,237	34.5	1,213	33.4	1,064	28.2	525	13.3
$2,001-2,500														
Total cost [3]	4,416	100.0	4,153	100.0	4,168	100.0	4,253	100.0	4,245	100.0	4,425	100.0	4,697	100.0
Grant aid [4]	932	21.1	2,118	51.0	1,885	45.2	1,377	32.4	980	23.1	611	13.8	150	3.2
Family resources [5]	2,437	55.2	849	20.4	1,045	25.1	1,567	36.8	2,039	48.0	2,938	66.4	4,046	86.1
Grant aid + family resources	3,369	76.3	2,967	71.4	2,930	70.3	2,944	69.2	3,019	71.1	3,549	80.2	4,196	89.3
Net Price [6]	1,047	23.7	1,186	28.6	1,238	29.7	1,309	30.8	1,226	28.9	876	19.8	501	10.7
$2,501-3,000														
Total cost [3]	4,925	100.0	4,424	100.0	4,471	100.0	4,595	100.0	4,878	100.0	5,097	100.0	5,130	100.0
Grant aid [4]	837	17.0	2,141	48.4	1,821	40.7	1,456	31.7	1,161	23.8	695	13.6	184	3.6
Family resources [5]	3,110	63.2	1,041	23.5	1,192	26.7	1,767	38.5	2,350	48.2	3,368	66.1	4,450	86.7
Grant aid + family resources	3,947	80.1	3,182	71.9	3,013	69.6	3,223	70.1	3,511	72.0	4,063	79.7	4,624	90.3
Net Price [6]	978	19.9	1,242	28.1	1,358	30.4	1,372	29.9	1,367	28.0	1,034	20.3	406	9.7
$3,001–4,000														
Total cost [3]	5,325	100.0	4,959	100.0	5,029	100.0	5,212	100.0	5,395	100.0	5,535	100.0	5,333	100.0
Grant aid [4]	964	18.1	2,589	52.2	2,396	47.6	1,906	35.6	1,473	27.3	756	13.7	194	3.6
Family resources [5]	3,290	61.8	883	17.8	1,074	21.4	1,824	35.0	2,356	43.7	3,523	63.6	4,553	85.4
Grant aid + family resources	4,254	80.0	3,472	70.0	3,470	69.0	3,730	71.6	3,829	71.0	4,279	77.3	4,757	89.2
Net Price [6]	1,071	20.0	1,487	30.0	1,559	31.0	1,482	28.4	1,566	29.0	1,256	22.7	576	10.8

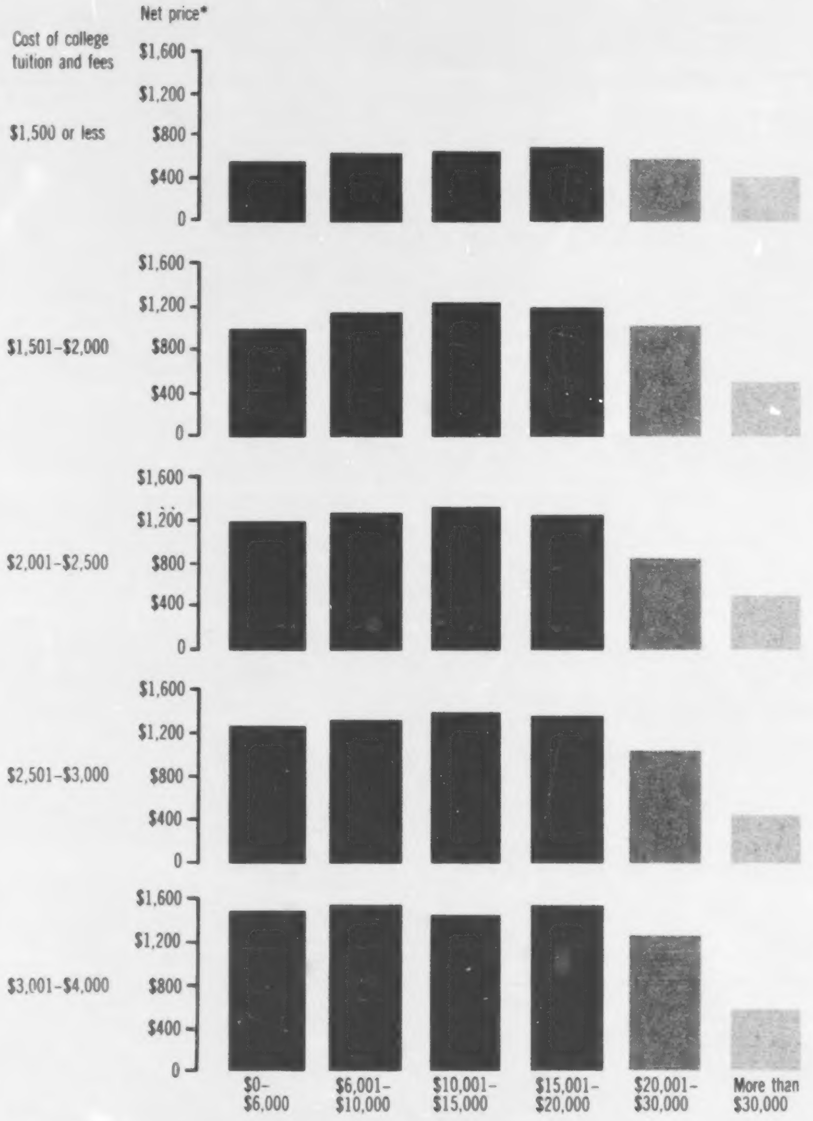
[1] For first-time full-time students.
[2] Costs of college tuition and fees are from National Center for Education Statistics, Higher Education General Information Survey.
[3] Total is the sum of all student expenses. All amounts listed are in dollars.
[4] Grant aid is composed of BEOG, SEOG, State aid, local and private scholarships, veterans benefits, and social security dependents benefits.
[5] Family resources are the sum of parents' contribution, spouses' contribution, and savings.
[6] Net price is total expenses minus the sum of grant aid and family resources.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Annual Evaluation Report on Programs Administered by the U.S. Office of Education*, preliminary data.

Chart 5.21
Net Price* of College for Students

Among students reporting parental income of $20,000 or less, the net price of college (the amount of money a student must raise to pay for his education exclusive of grant and parental aid) is not related to parental income, given equal institutional costs for tuition and fees.



*Net price is total expenses minus the sum of grant aid and family resources.

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Chapter 6

Youth Education and Labor Force Participation in Comparative Perspective

by Mary A. Golladay
and Jay Noell

This chapter presents data on patterns of education and labor force participation among youth 15 to 24 years old in the United States and 6 other industrialized countries. These data provide an opportunity to compare the education and work experiences of youth of this age in the United States with those of youth in other countries having similar economic and political institutions. The countries include Canada, France, Germany (F.R.), Italy, Japan, and the United Kingdom.

Between the ages of 15 and 24, most young people in the United States and in these other countries must decide whether or not to try to continue their education, get a job, or do both. These decisions are affected not only by personal considerations, but also by the opportunities available in their countries for education and work. The education and work experiences that youth have in these countries affect both their own lives and the political and social climates of their countries. Unless educational and work opportunities are available, many of these young people will not be able to realize their aspirations and mature into productive citizens.

The governments of the countries compared in this chapter all have a strong commitment to increasing the opportunities of youth to stay in school during this age span and to get decent jobs commensurate with their education and abilities. Yet there are substantial differences among these countries in the extent to which these young people continue their education and are successful in finding jobs. In interpreting the various education and work experiences of these 15- to 24-year-olds, national differences in customs, government policies, labor market conditions, and the racial/ethnic composition and distribution of the youth population should be kept in mind. Recent changes in the population size of this age group constitute another fundamental factor in analyzing differences among these countries. Before examining in detail the patterns of education and labor force participation of the youth in these 7 countries, it is useful to consider these population changes.

The numbers of schools and jobs needed for youth are closely associated with the sizes of their age groups. From a planning perspective, it is especially important to examine changes in the population size of this group because they suggest the magnitude of the adjustments necessary to accommodate this group in the schools and the labor force. Because the patterns of education and labor force participation differ significantly among 15- to 19-year-olds compared to 20- to 24-year-olds, data for each age group are presented separately.

Between 1960 and 1975 the number of youth in these age groups increased substantially in the United States. The population of 15- to 19-year-olds increased by 55 percent (entry 6.1) and the population of 20- to 24-year-olds by 72 percent (entry 6.2). These increases, a result of the post-war baby boom, amounted to 7.4 million additional 15- to 19-year-olds and 8.0 million additional 20- to 24-year-olds to be accommodated in the schools and labor market. With the exceptions of Canada (whose patterns tend to resemble those of the United States) and of France, none of the other countries experienced as much as a 20 percent increase in either age group.

Between 1975 and 1990 none of these seven countries will experience population increases in these age groups as great as those experienced by the United States between 1960 and 1975. In the United States by 1990, the number of 15- to 19-year-olds and 20- to 24-year-olds will actually decrease by some 19 percent and 5 percent, respectively. These decreases should relieve some of the pressures recently experienced by schools and the labor market in absorbing the children of the baby boom.

The patterns of population change among these youth between 1975 and 1990 will vary in the other countries, again with the exception of Canada, which will also have decreases in the sizes of both age groups. In Japan the number of 15- to 19-year-olds will increase by about 29 percent between 1975 and 1990, the largest increase among these countries in this time span, but the number of 20- to 24-year-olds will decrease by about 4 percent. In France, Italy, and the United Kingdom, the numbers of youth in both age groups will increase, while in Germany the number of 15- to 19-year-olds will decrease by 34 percent, but 20- to 24-year-olds will increase by about 6 percent. In summary, only Japan will have a greater increase in the number of 15- to 19-year-olds in the period from 1975 to 1990 than it did in the period from 1960 to 1975, while only Italy and the United Kingdom will have more 20- to 24-year-olds.

The increases in school enrollment of these age groups in the United States and the other countries between 1960 and 1975 were due not only to the population changes in the age groups but also to changes in enrollment rates (entry 6.3). In all countries in both age groups school enrollment rates (the percentage of the population group enrolled full-time) increased between 1960 and 1975. In the United States enrollment rates increased from 64 percent in 1960 to 72 percent in 1975 for 15- to 19-year-olds and from 12 percent to almost 22 percent for 20- to 24-year-olds.

With one exception, school enrollment rates were highest in the United States in 1960 and 1975 for both age groups. Japan had the highest rate among 15- to 19-year-olds in 1975 and also experienced the largest absolute increase in enrollment rates among 20- to 24-year-olds, going from 5 percent in 1960 to 15 percent in 1975. The United States also had a large increase in enrollment rates among 20- to 24-year-olds with enrollment rising from 12 percent to almost 22 percent of this age group.

Overall, school enrollment rates showed greater absolute increases among 15- to 19-year-olds than among 20- to 24-year-olds in all these countries. Still, enrollment rates for 15- to 19-year-olds in 1975 ranged from about 41 percent in Italy to 76 percent in Japan. Among 20- to 24-year-olds, school enrollment rates in 1975 varied from about 8 percent in the United Kingdom to the level of nearly 22 percent cited above for the United States.

Between 1960 and 1975 full-time school enrollment increased more in the United States than in these other countries, but the percent growth in enrollment was greater in several of the other countries (entry 6.4). Among 15- to 19-year-olds, full-time school enrollment increased 74 percent in the United States. Among the other 6 countries, only Japan (at 64 percent) and Germany (F.R.) (at 65 percent) had lower increases. The rest had increases that ranged from 131 percent in Canada to 208 percent in the United Kingdom. In contrast, among 20- to 24-year-olds, full-time school enrollment increased 207 percent in the United States, while only the increases in Canada (268 percent) and Japan (234 percent) were greater.

Between 1975 and 1980, school enrollments are projected to increase in all countries among both 15- to 19-year-olds and 20- to 24-year-olds. Although enrollment projections have not been made past 1980, patterns of expected population changes suggest that enrollment growth will decrease in most of these countries after 1980.

Another way to examine changes in school enrollment rates between 1960 and 1975 is to compare them with labor force participation rates during this period (entries 6.5 and 6.6). Because males and females have traditionally had different patterns of labor force participation, data for males and females are presented separately for both 15- to 19-year-olds and 20- to 24-year-olds.

School and work are often thought of as alternative activities and between 1960 and 1975 in all these countries except the United States and Canada, school enrollment rates for both male and female 15- to 19-year-olds increased, while labor force participation rates decreased (entry 6.5). In 1960 labor force participation rates exceeded school enrollment rates among these age groups in all these countries except the United States and Canada. By 1975 enrollment rates were higher than labor force participation rates for both males and females in all seven of these countries.

In the United States and Canada, enrollment rates also increased between 1960 and 1975, but labor force participation rates held steady or increased slightly. In 1960 the United States had some of the lowest rates of labor force participation for both males and females of this age. But by 1975, the labor force participation rates of both male and female 15- to 19-year-olds in the United States were the highest of the seven countries. For males the labor force participation rate was 60 percent; for females, 49 percent. The United States also had the highest school enrollment rates for this age group in 1975, except for Japan, whose rates of labor force participation by males and females in this age group were the lowest of these 7 countries.

In most of these countries, among these 15- to 19-year-olds, the differences between males and females decreased in both school enrollment and labor force participation rates between 1960 and 1975. For example, in the United States, females substantially increased both their education enrollment and labor force participation rates between 1960 and 1975. By 1975, school enrollment rates for the two sexes in the United States were virtually identical, although males continued to participate in the labor force at a higher rate. In addition, in France and the United Kingdom females this age had school enrollment rates higher than males in 1975; in Japan they also had a higher labor force participation rate.

In contrast to patterns among 15- to 19-year-olds, labor force participation rates were higher than enrollment rates among both male and female 20- to 24-year-olds in all countries in 1975 (entries 6.6a and 6.6b). Although this was also the case in 1960, some interesting changes occurred in the 15-year span. In all countries, enrollment rates of both males and females increased between 1960 and 1975. The absolute increases in rates were greater among females than among males of this age in the United States, Germany, Italy, and the United Kingdom. For example, in the United States enrollment rates among males increased from 17 percent to 24 percent, a difference of 7 percentage points. Among U.S. females, the increase was from 7 percent to almost 19 percent, a difference of almost 12 percentage points. In Italy, female education enrollment rates went from 0.7 percent to over 7 percent, a greater than 10-fold increase. The enrollment rate for male youth of this age in Italy only increased from 9 percent to about 14 percent.

Labor force participation rates among these youth also changed significantly between 1960 and 1975. Among 20- to 24-year-old males the rates decreased in all countries during this period. For example, in the United States, labor force participation rates of males in this age range decreased from 91 percent in 1960 to 85 percent in 1975. Still, in that year, male labor participation rates for the same age group were greater only in the United Kingdom (88 percent), Canada (87 percent), and France (86 percent). In Italy, the rate was 67 percent, the lowest of these 7 countries. In contrast to the males, changes between 1960 and 1975 in the participation rates of females of this age showed no consistent pattern. Rates decreased in Germany, Italy, and Japan, but increased in the United States, Canada, France, and the United Kingdom. In the United States the increase was from 47 percent to 64 percent, and only in Japan (where the rate was 66 percent) was the labor force participation rate among females higher than in the United States.

It is also useful to examine the combined education and labor force participation rates of these youths. Although no data are available on how many of these young people worked and went to school at the same time in these 7 countries, the two activities are not mutually exclusive. By combining the education and labor force participation rates for the youth in these countries, some insight is gained about the number of these youth who are participating in education, the labor force or both. Some youth, of course, are participating in neither.

Among 15- to 19-year-olds, the combined education and labor force participation rate of 120 in the United States was higher than in any of the other 6 countries in 1975. Next in order were the combined rates of 114 in Canada and of 98 in Japan. The lowest combined rates were found in Italy, at 71, and the United Kingdom, at 88.

Among 20- to 24-year-olds in 1975, again the United States had the highest combined education and labor force participation rate at 96, then Canada, which had a combined rate of 92, and Japan, with a rate of 86. The lowest rates were again reported in Italy, at 62, and the United Kingdom, at 81. Although care must be exercised in interpreting these combined rates, these figures do show that the education and labor force participation rates for these age groups differ substantially among these countries.

When examined separately, changes in labor force participation for these age groups between 1960 and 1975 suggest certain trends (entries 6.7 and 6.8). Among male and female 15- to 19-year-olds, only in the United States, Canada, and France did the numbers increase, and only in the United States and Canada were the increases substantial. For example, in the United States the increase in the number of males of this age in the labor force was 61 percent; of females, 97 percent. Canada's increase was larger for males but smaller for females. Further, the decreases in the number of males and females of these ages in the labor forces of Germany (F.R.), Italy, Japan, and the United Kingdom were substantial. The smallest decreases were reported by the United Kingdom, which had 28 percent fewer males and 31 percent fewer females aged 15 to 19 years in the labor force in 1975 than in 1960.

Compared to the younger group, patterns of change are different among 20- to 24-year-olds with respect to the relative number of males and females participating in the labor force. Only in Germany (F.R.) and Italy do the numbers participating in the labor force decrease for both males and females, although in Japan there is a decrease in the number of males. Increases were greatest in North America, with Canada's being slightly more than those in the United States. In the United States the number in this age group in the labor force increased 61 percent among males and 136 percent among females between 1960 and 1975. These increases in the number in the labor forces of all these countries should be kept in mind when interpreting youth unemployment rates, which are considered next.

Unemployment rates of youth (15- to 24-year-olds) rose in all of these countries between 1970 and 1976 (entry 6.9). For example, in the United States, youth unemployment rose from 9.9 percent in 1970 to 14.0 percent in 1976. Canada's increase was similar. Among European countries, Italy's rates were highest, rising from 10.2 percent in 1970 to 14.5 percent in 1976. Youth unemployment rates increased the most, however, in the United Kingdom, France, and Germany (F.R.).

Levels of youth unemployment in Europe are approaching those previously found only in North America. Japan remains something of an exception, having had a youth unemployment rate of 2.0 percent in 1970 and one of 3.1 percent in 1976.

As noted before, the reported changes in levels of youth unemployment must be interpreted in the context of a variety of differences among these countries in demographic, cultural, governmental, and economic characteristics. Nonetheless, the seriousness of the problem of youth unemployment in all countries mentioned must be noted.

Youth unemployment as a special problem is highlighted by examining it as a proportion of total unemployment in these countries (entry 6.10). Only in Germany (F.R.) and Japan is youth unemployment less than 30 percent of total unemployment. In Italy youth unemployment is almost 64 percent of total unemployment, the highest among these 7 countries. In the United States, the figure is almost 46 percent. The problem of youth unemployment—and educational enrollment opportunities—may warrant greater attention if this problem with its short- and long-term consequences is not to become intensified.

Table 6.1
Population 15 to 19 years old: Selected countries, 1960 to 1990

Country	1960	1970	1975	1980	1985	1990	Percent change 1960 to 1975	Percent change 1975 to 1990
	(Numbers in thousands)							
United States	13,490	19,163	20,903	20,349	18,018	16,886	**55.0**	**−19.2**
Canada	1,363	2,064	2,332	2,340	1,966	1,821	**71.1**	**−21.8**
France	2,804	4,180	4,163	4,250	4,348	4,466	**48.5**	**7.3**
Germany (F.R.)	4,071	4,053	4,555	5,114	4,590	3,008	**11.9**	**−34.0**
Italy	3,736	3,903	4,092	4,552	4,548	4,281	**9.5**	**4.6**
Japan	9,313	9,243	7,895	8,217	8,768	10,160	**−15.2**	**28.7**
United Kingdom	3,556	3,844	4,147	4,602	4,517	3,924	**16.6**	**−5.4**

SOURCE: Organization for Economic Cooperation and Development, Paris, France, special tabulations by the OECD Secretariat.

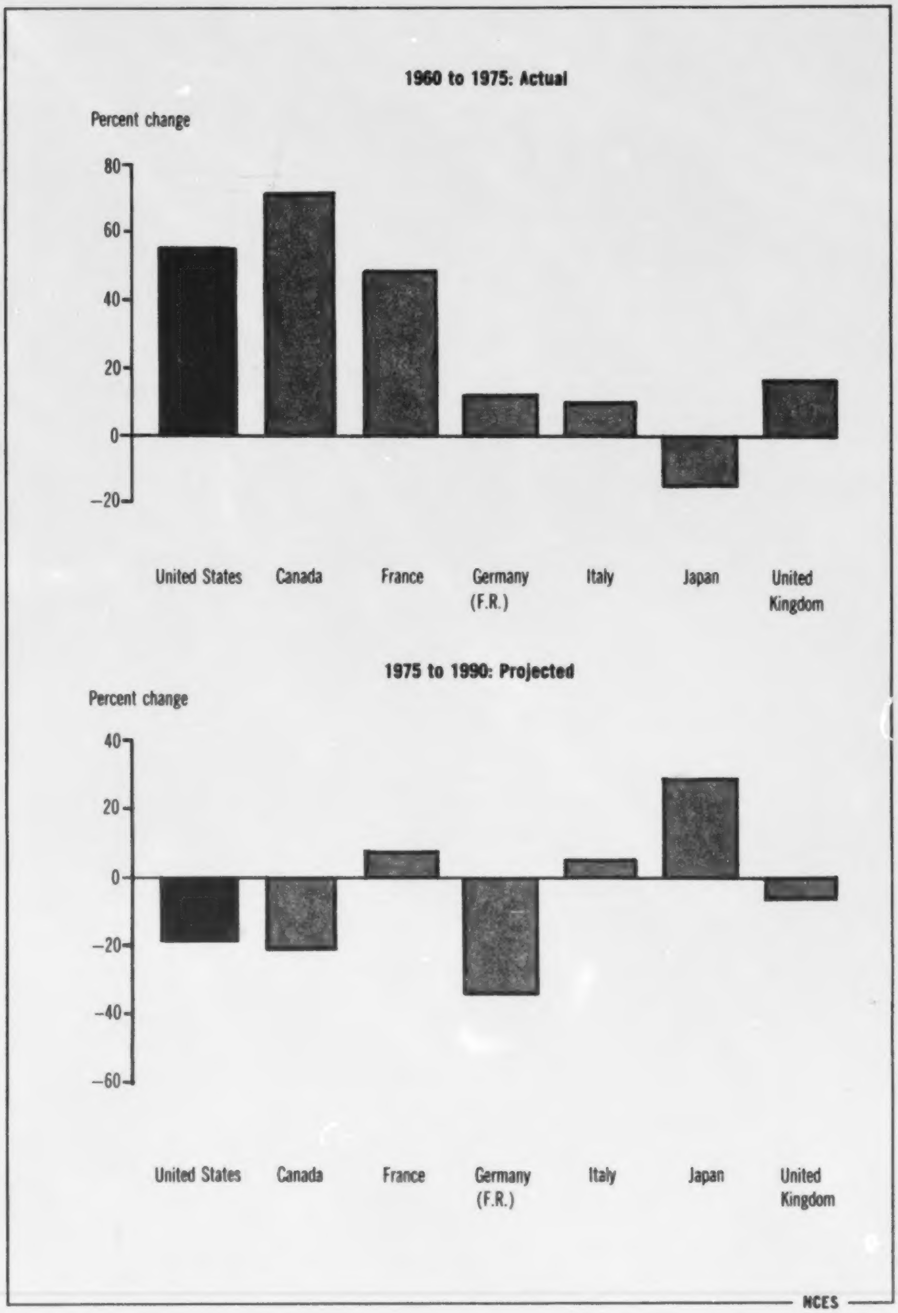
Table 6.2
Population 20 to 24 years old: Selected countries, 1960 to 1990

Country	1960	1970	1975	1980	1985	1990	Percent change	
							1960 to 1975	1975 to 1990
				(Numbers in thousands)				
United States	11,116	17,006	19,115	20,494	20,393	17,823	72.0	–5.4
Canada	1,174	1,814	2,080	2,389	2,417	2,046	77.2	–1.6
France	2,917	4,117	4,361	4,215	4,461	4,572	49.5	4.8
Germany (F.R.)	4,788	3,822	4,317	4,510	4,783	4,558	–9.8	5.6
Italy	4,067	4,043	3,914	4,075	4,526	4,560	–3.8	16.5
Japan	8,292	10,832	9,173	7,904	8,178	8,782	10.6	–4.3
United Kingdom	3,385	4,264	3,865	4,134	4,671	4,533	14.2	17.3

SOURCE: Organization for Economic Cooperation and Development, Paris, France, special tabulations by the OECD Secretariat.

Chart 6.1
Change in the Population of 15- to 19-Year-Olds

Between 1960 and 1975 the population 15 to 19 years old increased by 55 percent in the United States, substantially more than the increases in Europe but less than the 71 percent increase in Canada.



1960 to 1975: Actual

1975 to 1990: Projected

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Chart 6.2
Change in the Population of 20- to 24-Year-Olds

Between 1960 and 1975 the population 20 to 24 years old increased by 72 percent in the United States, less than the 77 percent in Canada but greater than the increases in Europe and Japan.

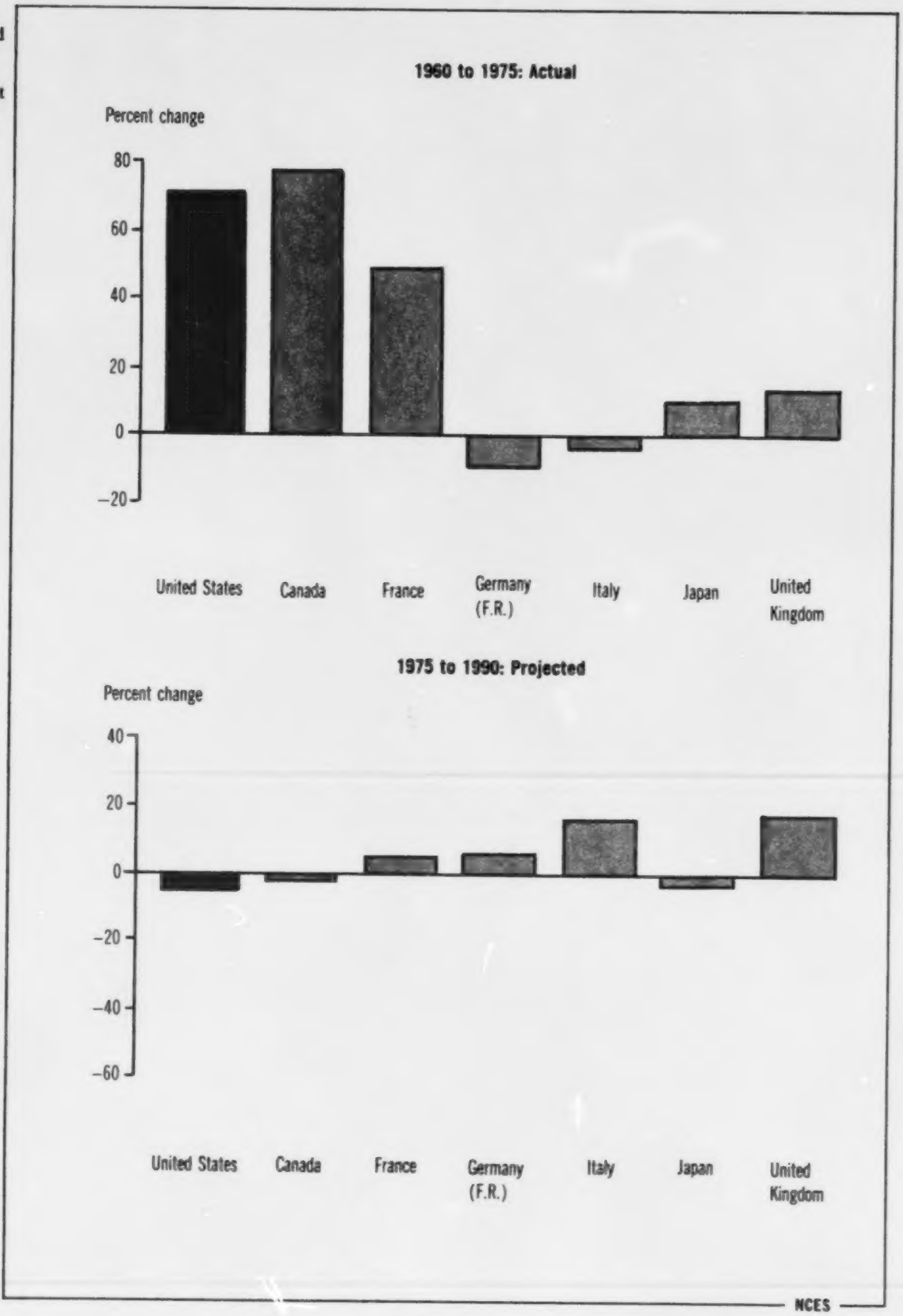

Table 6.3
Full-time school enrollment rates for 15- to 19- and 20- to 24-year-olds: Selected countries, 1960 and 1975

Country	15- to 19-year-olds		20- to 24-year-olds	
	1960	1975	1960	1975
United States	64.1	72.0	12.1	21.6
Canada	49.2	66.4	7.0	14.5
France	32.5	51.3	7.3	9.9
Germany (F.R.)	34.7	51.3	6.9	11.1
Italy	18.7	40.8	4.9	10.8
Japan	39.4	76.3	4.8	14.5
United Kingdom	16.6	43.9	4.9	7.5

SOURCE: Organization for Economic Cooperation and Development, Paris, France, special tabulations by the OECD Secretariat.

Chart 6.3
Full-time School Enrollment Rates

Larger proportions of young people were enrolled in school in 1975 than in 1960. In 1975, 72 percent of those aged 15 to 19 in the United States were enrolled in school full-time, compared with 76 percent in Japan.

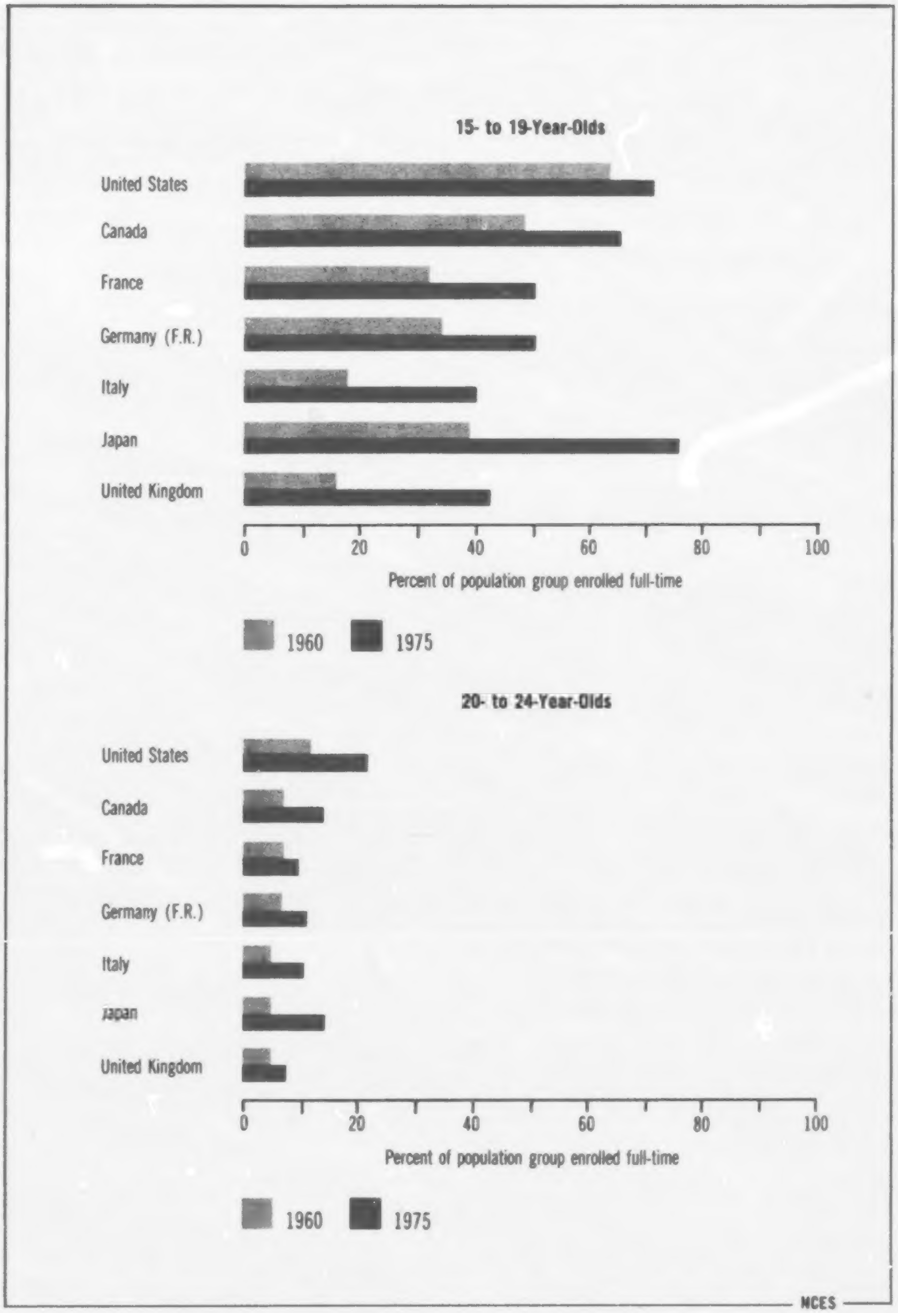

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Table 6.4
Full-time school enrollment: Selected countries, 1960 to 1980

Country	Midyear enrollment				Growth 1960 to 1975	Percent growth 1960 to 1975
	1960	1970	1975	1980		
	(Numbers in thousands)					
15- to 19-year-olds						
United States	8,647	14,257	15,050	15,424	6,403	**74**
Canada	671	1,449	1,548	1,555	877	**131**
France	911	1,889	2,136	2,342	1,225	**134**
Germany (F.R.)	1,413	1,925	2,337	2,685	924	**65**
Italy	699	1,233	1,669	2,290	970	**139**
Japan	3,669	5,843	6,024	6,680	2,355	**64**
United Kingdom	590	1,303	1,820	2,167	1,230	**208**
20- to 24-year-olds						
United States	1,345	3,367	4,129	4,876	2,784	**207**
Canada	82	283	302	365	220	**268**
France	213	395	432	472	219	**103**
Germany (F.R.)	330	390	479	523	149	**44**
Italy	199	348	423	566	224	**113**
Japan	398	1,300	1,330	1,359	932	**234**
United Kingdom	166	260	290	401	124	**75**

SOURCE: Organization for Economic Cooperation and Development, Paris, France, special tabulations by the OECD Secretariat.

Chart 6.4
Growth in Full-time School Enrollment: 1960 to 1975

Although growth between 1960 and 1975 in the actual numbers of youth enrolled in school full-time was greatest in the United States, the percentage growth in enrollment was smaller in the United States than in several of the other countries.

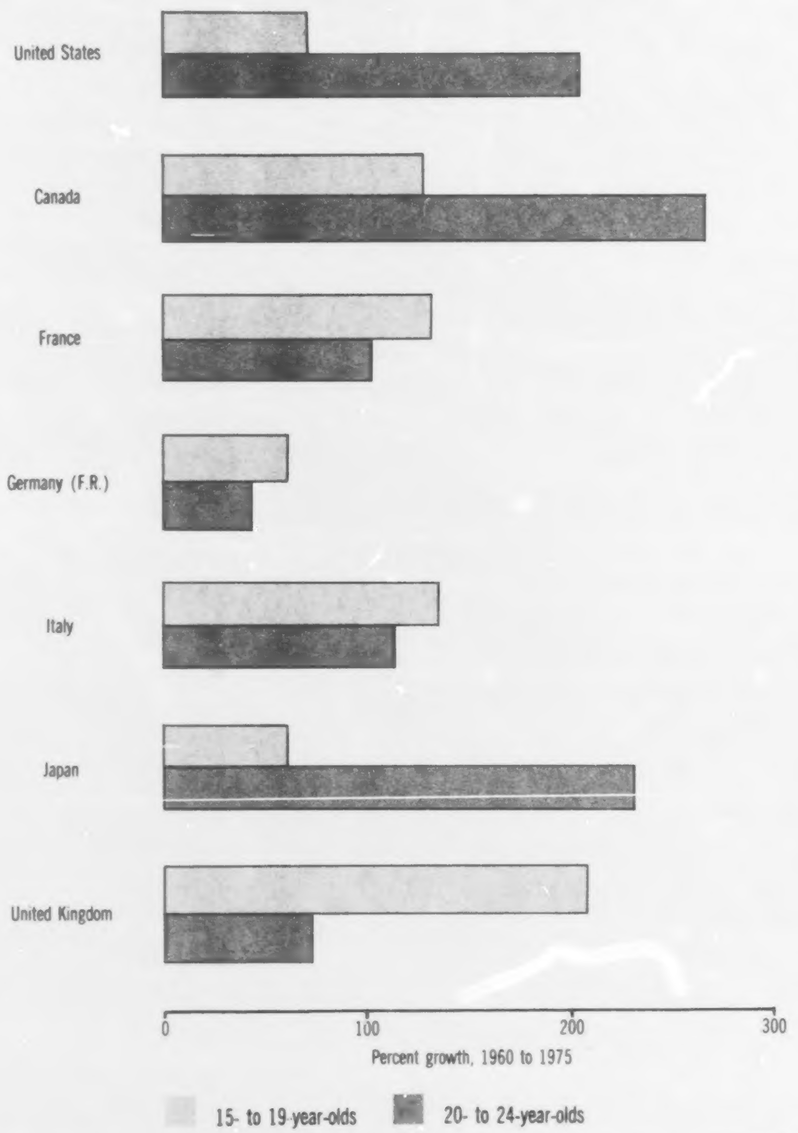

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Table 6.5
Education enrollment and labor force participation rates for 15- to 19-year-olds, by sex: Selected countries, 1960 to 1975

	Education enrollment			Labor force participation		
Country	1960	1970	1975	1960	1970	1975
Male						
United States	68.7	75.4	72.1	58.9	50.5	60.2
Canada	52.7	71.6	67.3	52.6	46.4	55.0
France	30.9	40.7	48.7	61.1	49.3	42.7
Germany (F.R.)	37.0	52.3	56.4	77.1	57.0	49.8
Italy	22.1	37.0	46.5	67.1	41.8	28.9
Japan	36.2	65.0	77.1	52.4	31.5	20.7
United Kingdom	18.5	34.9	43.7	76.8	62.1	47.4
Female						
United States	59.4	73.4	71.9	39.0	37.0	49.0
Canada	45.7	68.8	65.4	37.6	34.5	41.4
France	34.1	49.8	54.0	46.0	38.5	33.5
Germany (F.R.)	32.3	42.5	45.9	75.7	53.9	43.0
Italy	15.2	26.0	34.8	45.2	32.5	22.0
Japan	42.7	63.6	75.5	48.8	33.6	21.7
United Kingdom	14.7	32.9	44.1	73.8	62.4	43.5

SOURCE: Organization for Economic Cooperation and Development, Paris, France.

Table 6.6
Education enrollment and labor force participation rates for 20– to 24–year–olds, by sex: Selected countries, 1960 to 1975

Country	Education enrollment			Labor force participation		
	1960	1970	1975	1960	1970	1975
Male						
United States	17.0	26.6	24.4	91.4	86.2	84.5
Canada	9.8	20.7	18.3	90.4	88.9	87.0
France	8.2	12.3	12.4	91.8	86.5	86.4
Germany (F.R.)	9.9	12.6	13.4	91.1	83.7	71.8
Italy	9.0	11.6	14.4	77.4	63.6	66.7
Japan	5.7	17.7	19.9	87.7	80.4	75.8
United Kingdom	8.3	8.0	9.2	97.0	90.4	88.3
Female						
United States	7.2	12.9	18.8	46.5	57.9	64.0
Canada	4.3	10.5	10.7	46.3	58.1	64.0
France	6.4	6.8	7.3	59.4	65.4	63.7
Germany (F.R.)	3.8	7.6	8.8	75.7	68.4	63.1
Italy	0.7	5.5	7.1	48.0	42.8	44.2
Japan	3.9	6.8	9.0	70.6	68.8	65.7
United Kingdom	1.5	4.1	5.7	60.4	61.4	62.2

SOURCE: Organization for Economic Cooperation and Development, Paris, France.

Chart 6.5 a
Education Enrollment and Labor Force Participation Rates for Males 15 to 19 Years Old

Increases in school enrollment rates of male 15- to 19-year-olds have been accompanied by decreases in their labor force participation rates in all of the countries except the United States and Canada. In 1975 education enrollment rates of these male youths exceeded their labor force participation rates in all the countries.

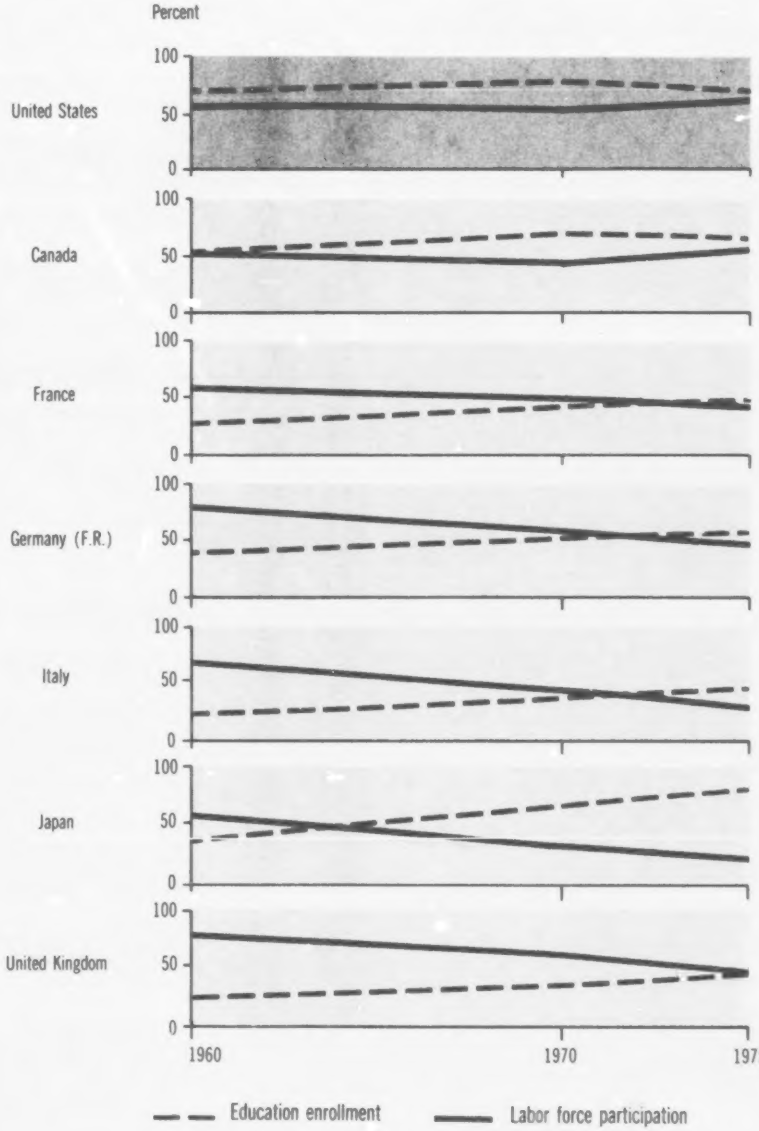

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Chart 6.5 b
Education Enrollment and Labor Force Participation Rates for Females 15 to 19 Years Old

In European countries and Japan between 1960 and 1975, education enrollment rates of female 15- to 19-year-olds rose while their labor force participation dropped. In the United States and Canada during the same period, their education enrollment and labor force participation rates both rose.

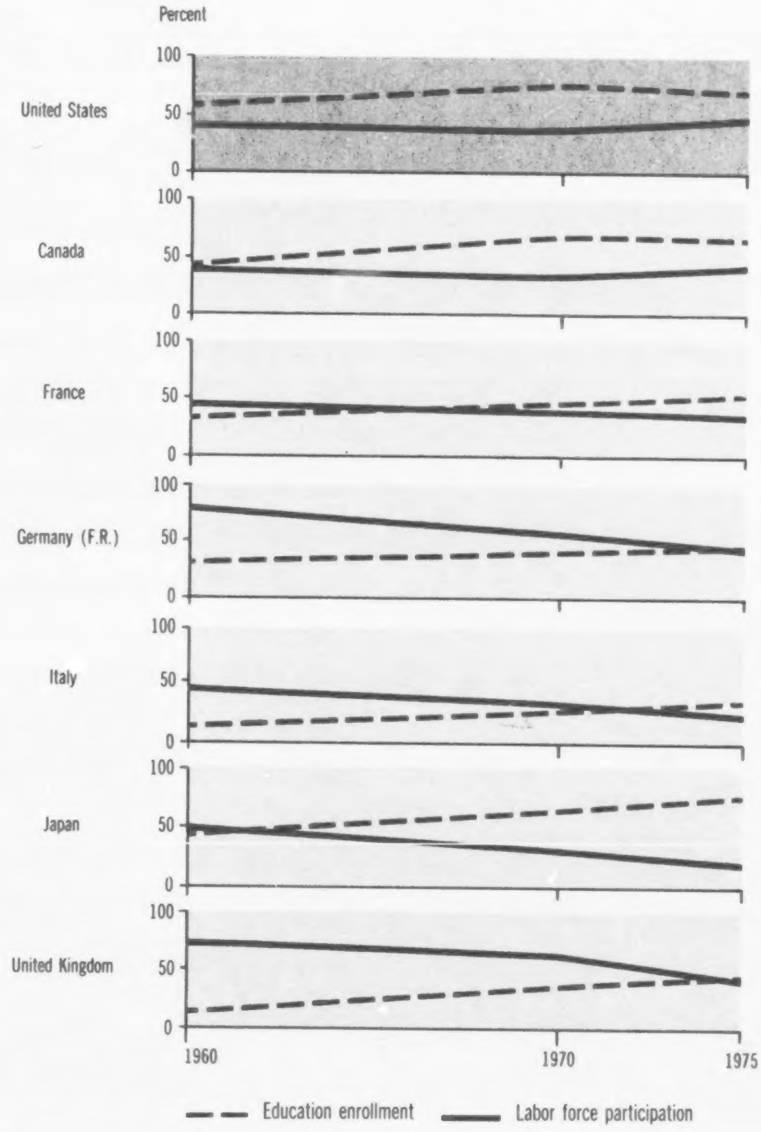

Chart 6.6a
Education Enrollment and Labor Force Participation Rates for Males 20 to 24 Years Old

Males 20 to 24 years old had higher education enrollment rates, but lower labor force participation rates in 1975 than in 1960.

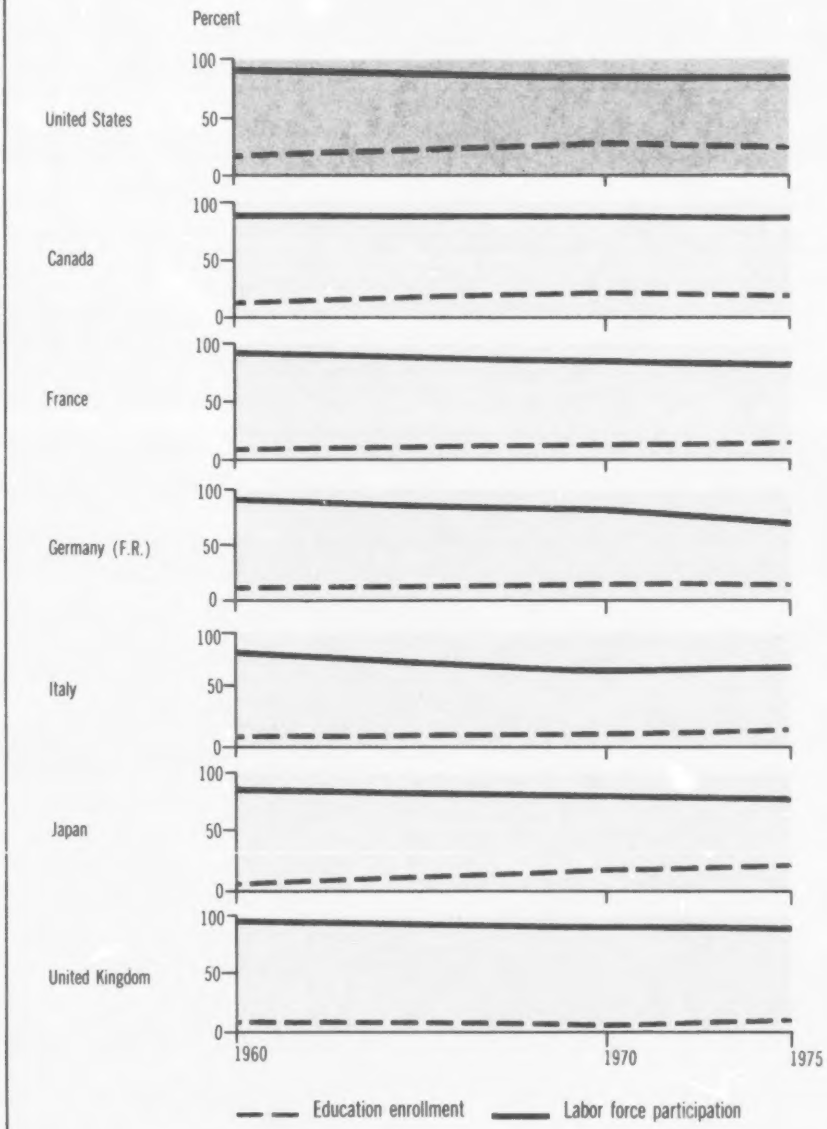

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Chart 6.6 b
Education Enrollment and Labor Force Participation Rates for Females 20 to 24 Years Old

Females 20 to 24 years old had higher education enrollment rates in 1975 than in 1960. In the United States, Canada, France, and the United Kingdom, their labor force participation rates also increased during this period.

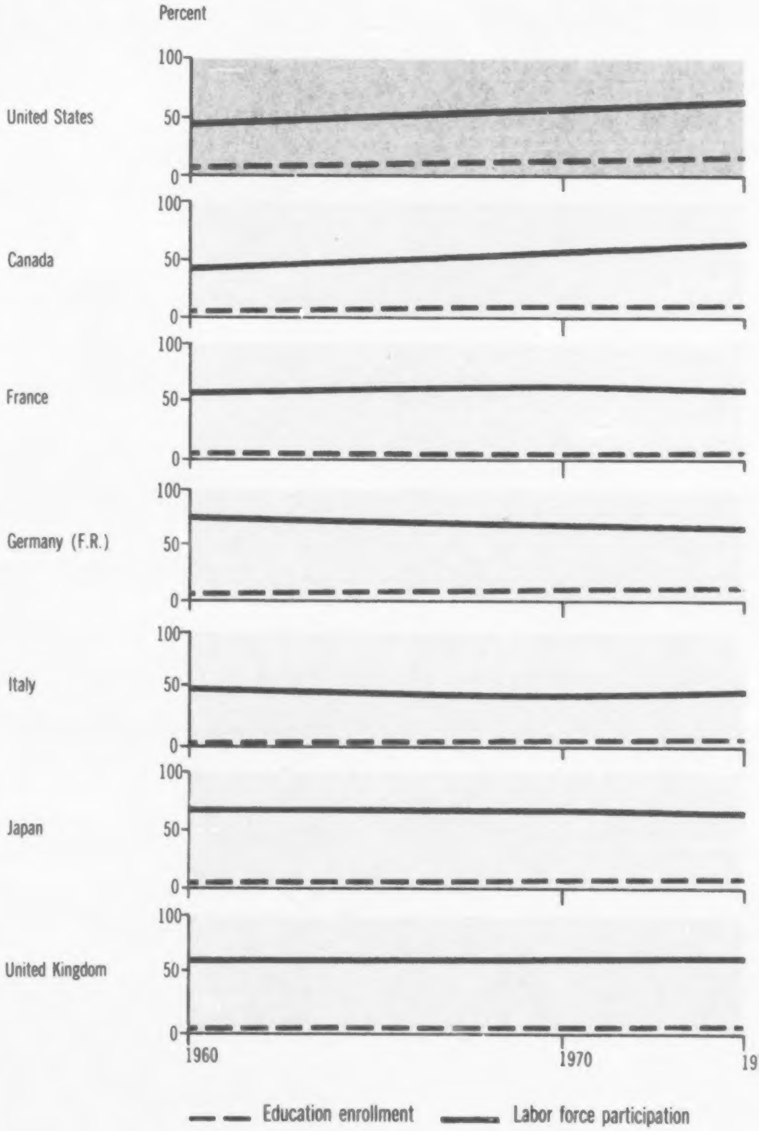

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Table 6.7
Labor force 15 to 19 years old: Selected countries, 1960 to 1980

Country	1960	1970	1975	1980	Percent change 1960 to 1975
	(Numbers in thousands)				
Male					
United States [1]	3,184	4,395	5,127	5,149	**61**
Canada	369	486	634	674	**72**
France	869	1,048	900	785	**4**
Germany (F.R.)	1,601	1,183	1,070	NA	**−33**
Italy [2]	1,486	857	715	677	**−52**
Japan	2,360	1,500	830	790	**−64**
United Kingdom [3]	(1,392)	[1]1,224	[1](1,008)	1,071	**−28**
Female					
United States [1]	2,062	3,250	4,059	4,248	**97**
Canada	254	351	472	520	**86**
France	626	790	685	644	**9**
Germany (F.R.)	1,509	1,066	905	NA	**−40**
Italy [2]	999	640	537	475	**−46**
Japan	2,210	1,540	850	800	**−62**
United Kingdom [3]	(1,268)	[1]1,169	[1](876)	902	**−31**

NA: Not available.

[1] 16- to 19-year-olds.

[2] 14- to 19-year-olds.

[3] Figures in parentheses are estimated.

SOURCE: Organization for Economic Cooperation and Development, Paris, France.

Table 6.8
Labor force 20 to 24 years old: Selected countries, 1960 to 1980

Country	1960	1970	1975	1980	Percent change 1960 to 1975
	(Numbers in thousands)				
Male					
United States	5,089	7,378	8,186	8,644	**61**
Canada	557	807	929	992	**67**
France	1,357	1,827	1,924	1,759	**42**
Germany (F.R.)	2,229	1,644	1,670	NA	**–30**
Italy	1,412	1,312	1,196	1,350	**–15**
Japan	3,280	4,380	3,510	2,930	**–7**
United Kingdom *	(1,673)	1,951	(1,748)	1,824	**4**
Female					
United States	2,590	4,893	6,116	7,114	**136**
Canada	279	526	674	798	**142**
France	834	1,312	1,333	1,309	**60**
Germany (F.R.)	1,768	1,270	1,451	NA	**–25**
Italy	909	847	802	969	**–12**
Japan	2,790	3,770	3,010	2,490	**8**
United Kingdom *	(1,015)	1,293	(1,180)	1,224	**16**

NA: Not available.
* Figures in parentheses are estimated.

SOURCE: Organization for Economic Cooperation and Development, Paris, France.

Chart 6.7
Change in the 15- to 19-Year-Old Labor Force: 1960 to 1975

Large increases in the 15- to 19-year-old labor force in the United States and Canada contrast sharply with decreases in Japan, Italy, and Germany.

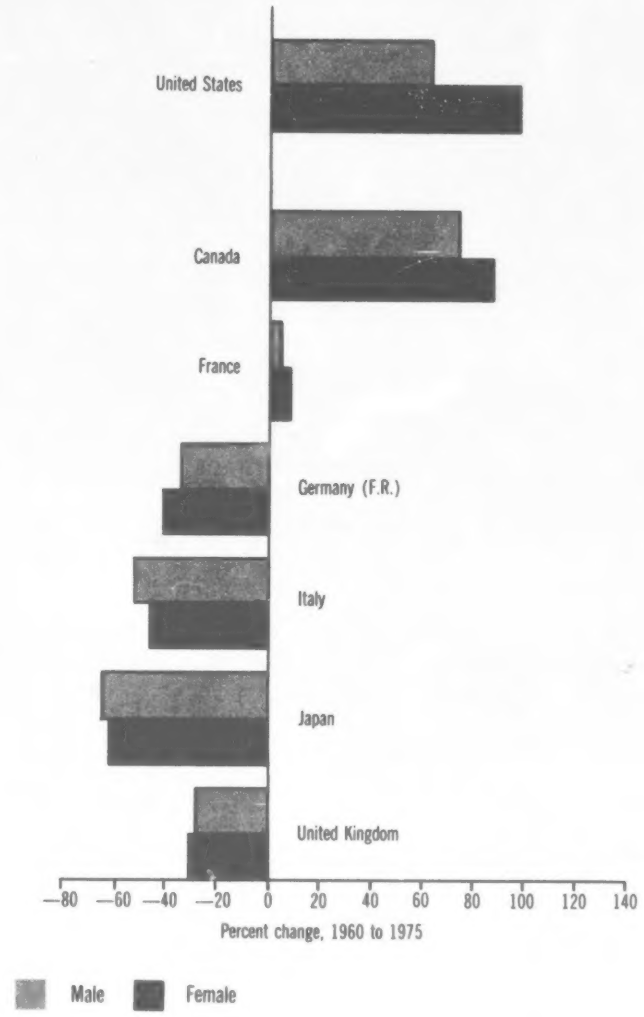

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Chart 6.8
Change in the 20- to 24-Year-Old Labor Force: 1960 to 1975

Increases in the 20- to 24-year-old labor force have been greatest in the United States and Canada.

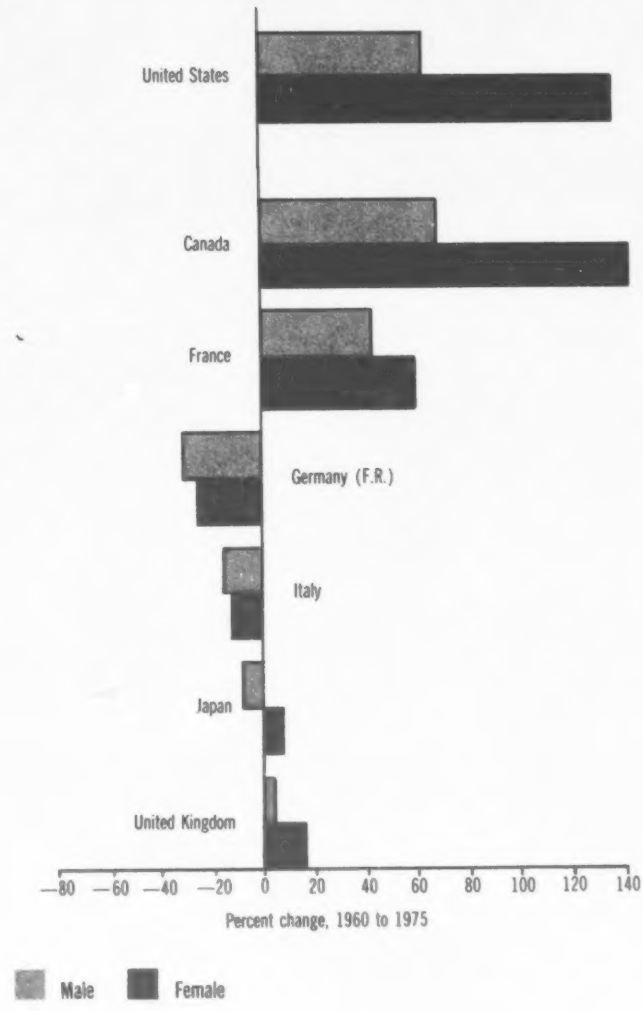

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Table 6.9
Unemployment rates for youths 15 to 24 years old: Selected countries, 1970 to 1976

Country	1970	1971	1972	1973	1974	1975	1976
United States [1]	9.9	11.6	11.2	9.8	11.2	15.2	14.0
Canada	10.3	11.3	11.1	9.7	9.4	[2] 12.2	12.5
France [3]	1.5	2.0	2.4	2.9	4.3	7.6	8.4
Germany (F.R.) [3]	0.3	0.5	0.7	1.0	3.1	5.7	5.1
Italy [4]	10.2	10.1	13.1	12.6	11.1	12.8	14.5
Japan	2.0	2.1	2.4	2.3	2.5	3.0	3.1
United Kingdom [5, 6]	2.9	4.5	4.6	2.8	3.2	7.4	11.1

[1] Age group 16–24 years old.
[2] New data collection procedures were adopted in 1975.
[3] Unemployed aged under 25 years old; labor force aged 15–24 years old.
[4] Age group 14–24 years old.
[5] Unemployed aged under 25 years old; labor force aged 16–24 years old.
[6] Rate for Great Britain.

SOURCE: Organization for Economic Cooperation and Development, Paris, France.

Chart 6.9
Youth Unemployment

Youth unemployment rates rose in many countries during the early 1970's. Since 1975 youth unemployment rates have declined slightly in the United States and Germany.

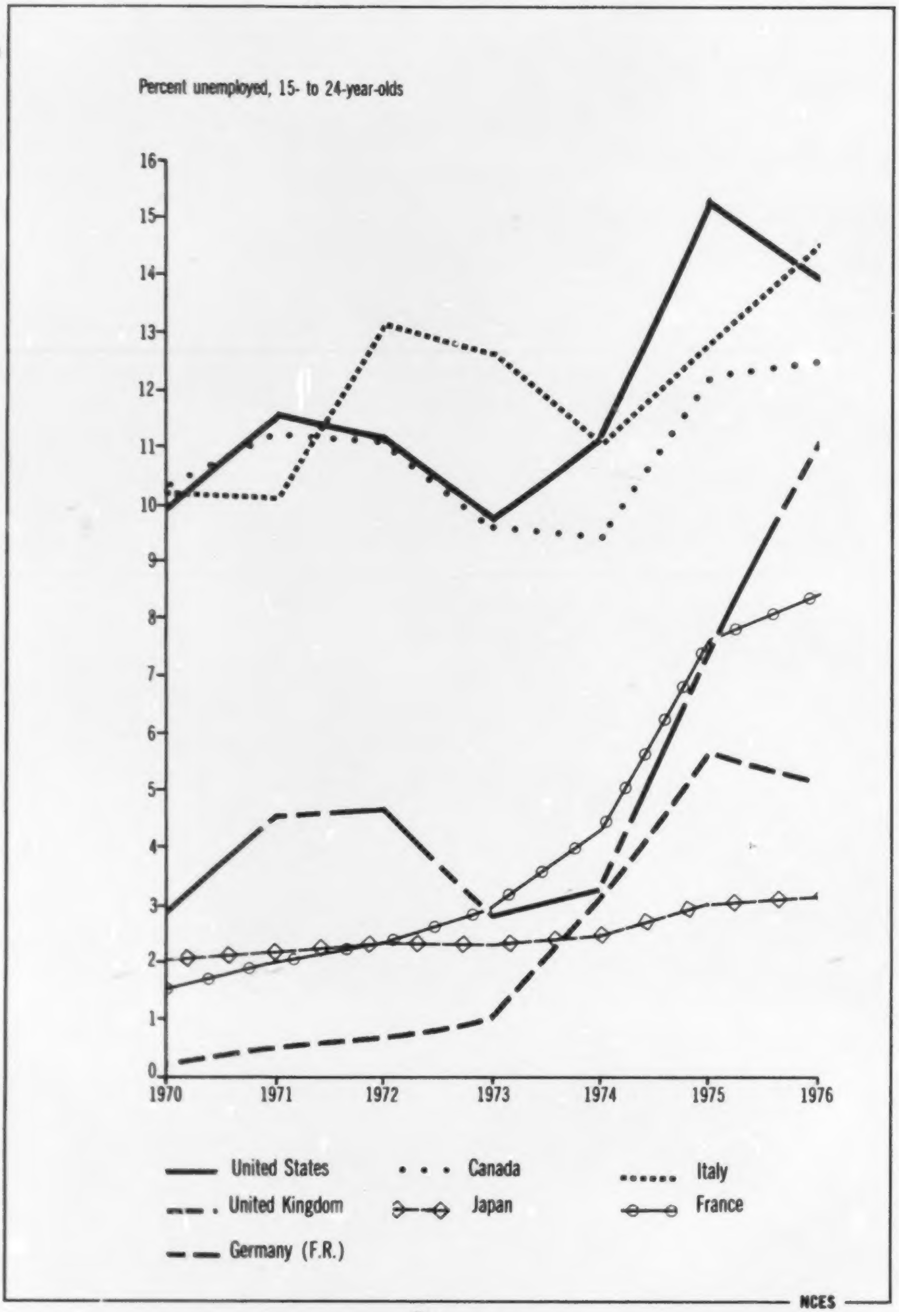


Table 6.10
Unemployment of youth aged 15 to 24 years old as a percent of total unemployment: Selected countries, 1960 to 1976

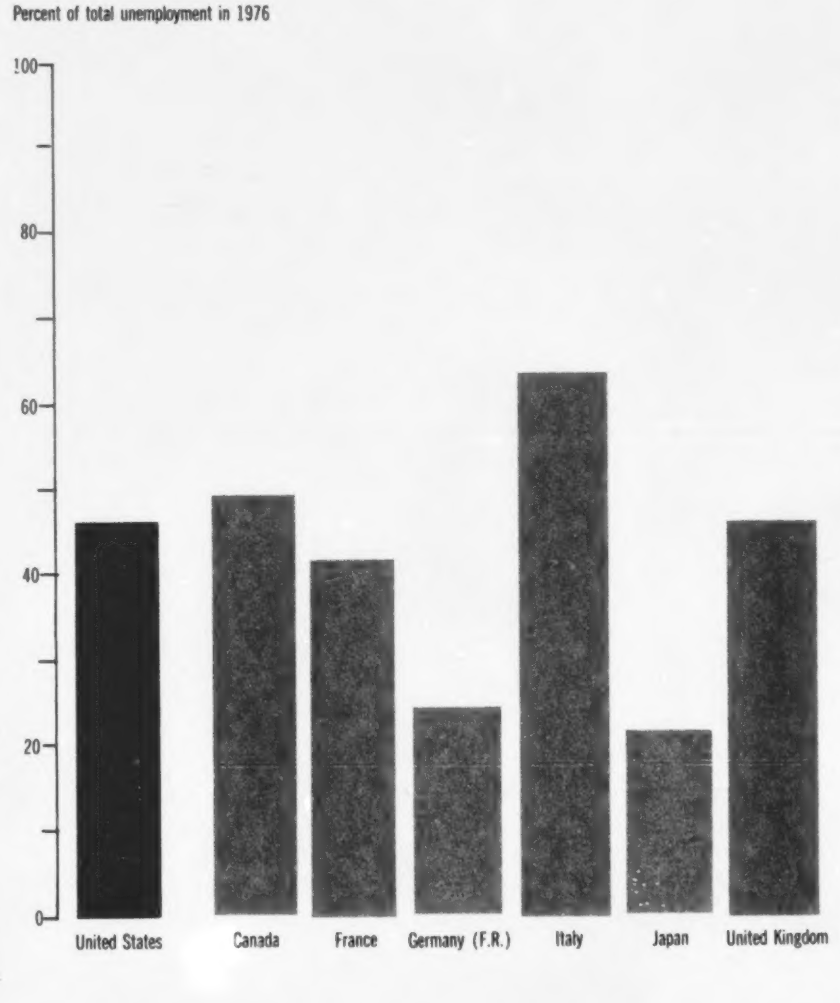
Country	1960	1970	1975	1976
United States [1]	33.6	48.2	45.7	**46.3**
Canada	34.5	45.1	[2]47.4	**48.2**
France [3]	[4]25.9	28.2	42.4	**42.6**
Germany (F.R.) [3]	18.1	12.1	26.8	**24.2**
Italy [5]	14.7	61.2	63.6	**64.1**
Japan	47.6	37.3	25.0	**22.2**
United Kingdom [3, 6]	[4]16.9	27.0	39.7	**46.2**

[1] Youth aged 16 to 24 years old as a percent of total unemployment.
[2] New data collection procedures were adopted in 1975.
[3] Youth aged under 25 years old as a percent of total unemployment.
[4] Estimated by OECD Secretariat.
[5] Youth aged 14-24 years old as a percent of total unemployment.
[6] Figures refer to Great Britain.

SOURCE: Organization for Economic Cooperation and Development, Paris, France, special tabulations by the OECD Secretariat.

Chart 6.10
Youth* Unemployment as Percent of Total Unemployment

Youth unemployment comprises a greater proportion of total unemployment in Italy and Canada than in the United States.



*15 to 24 years old

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The Condition of Education

3 Appendix

Data in this report are derived from many sources and may be based on complete counts, sample surveys, administrative records, or mathematical projections. The sources include Federal and State agencies, private research organizations, and professional associations.

Since they have been contributed from a variety of sources, the data differ considerably as to reference periods, operational definitions, and collection methods. All data are open to errors of various kinds. Even surveys purporting to cover a complete population are subject to problems of faulty design, incomplete response, inaccurate processing, and biased interpretation. The use of sampling techniques compounds these problems by introducing sampling error.

Particular care should be taken in comparing data from the different sources. Such data may not be strictly comparable because of differences in survey procedures, sampling frames, time references, and measurement instruments.

This guide to principal data sources outlines key characteristics of each source and is not intended to be exhaustive. It presents first the sources of Government data, listed by agency, and then the contributions of private research and professional associations. Readers should consult the primary sources for additional details.

National Center for Education Statistics

The National Center for Education Statistics collects data primarily through census or sample surveys of educational institutions. NCES also conducts some sample surveys of individuals, such as those designed to follow the educational experiences and chart the performance levels of young Americans.

Surveys of Educational Institutions

Annual data on public elementary and secondary education are obtained from the State departments of education. Statistics on privately controlled elementary and secondary education are gathered periodically from the universe of nonpublic schools. At the higher education level, institutional data are collected annually from administrators in all public and private institutions. Data on noncollegiate vocational and technical education and other specialized topics are generally collected on a sample basis. Additional information on the data collection programs of NCES is presented in Part 2 of this report. For more detailed information about the survey instruments, sampling frames and methodology used in specific surveys, the individual reports should be obtained.

National Assessment of Educational Progress (NAEP)

Through annual assessments, NAEP obtains data on the achievement levels of young Americans in various learning areas. Different learning areas are assessed every year, and all areas are periodically reassessed to measure changes in educational achievement.

The exercises are administered to carefully selected representative samples of four age groups: 9-year-olds, 13-year-olds, 17-year-olds, and young adults aged 26 to 35. The assessment group of 17-year-olds includes a sample of 17-year-olds not enrolled in school. Results are reported for each age level and by region, sex, racial group, parental education, and size and type of community.

NAEP uses weighted percentages of correct responses to describe the performance of a group on an exercise. Each reported percentage is an estimate of the percentage of persons in a given group who could have given a certain acceptable response to a specific exercise.

For more information on the NAEP design and methodology, see *National Assessment of Educational Progress,* report 03/04–GY, General Information Yearbook (Washington, D.C.: Government Printing Office, 1974).

National Longitudinal Study (NLS)
NLS periodically queries a national sample of the high school class of 1972 to chart the educational, vocational, and personal development of these young Americans. The population consists of all 12th graders enrolled during 1972 in all public and private schools in the 50 States and the District of Columbia.

The original sample design was a deeply stratified two-stage probability sample with schools as first-stage sampling units and students as second-stage units. The first-stage sampling frame was constructed from computerized school files maintained by the Office of Education and by the National Catholic Education Association. The schools were then stratified according to various criteria and randomly selected within strata. Except for schools in low income areas or with high black enrollments and schools with small enrollments, the schools were sampled with equal probability and without replacement. From each selected school, 18 students were randomly chosen to participate.

The base-line survey of the senior class of 1972 was conducted in the spring of 1972. Three follow-up surveys were conducted in fall 1973, fall 1974, and fall 1976. For additional information concerning the NLS, contact the National Longitudinal Studies Branch, National Center for Education Statistics, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

National Institute of Education

Survey of Secondary School Principals
In cooperation with the National Association of Secondary School Principals, the National Institute of Education conducted a nationwide survey of public and private secondary school principals in 1977. The survey was designed to provide current information on school programs, organizations, and management from the perspective of the administrators directly in charge.

Two thousand public schools and 600 private schools were selected from the Curriculum Information Center universe files of secondary schools containing a 12th grade. The sample was stratified with respect to region and urban, suburban, or rural metropolitan status. Private schools were additionally stratified according to whether they were Catholic. Within each stratum, schools were selected with probabilities proportional to school enrollment. By this procedure, urban schools were slightly overrepresented in number, but not in terms of their share of total enrollment.

The questionnaire was sent to principals during the summer and fall of 1977. Seventy-two percent of the public school principals responded; the private school response rate was 71 percent. The public school data have been tabulated and are being analyzed; data from the private school survey are currently being tabulated. A full report of the public and private school results is expected this year. Further information is available from the National Institute of Education, Washington, D.C. 20208.

Bureau of the Census

The Bureau of the Census provides data through a regular program of data collection and through supplements conducted for other organizations. The Census mechanism for data collection cited most frequently in this report is the Current Population Survey (CPS). The data on preprimary and adult education, and on educational attainment and labor force participation of the population were collected from the CPS or supplements to it.

Current Population Survey (CPS)

The primary purpose of the CPS is to obtain a monthly measure of labor force participation for the Bureau of Labor Statistics. It gathers data on the employment status of the civilian resident noninstitutionalized population 16 years old and over. In addition, it provides monthly population estimates as well as annual data on such characteristics of the population as income, schooling, age, race, sex, marital status, and living arrangements. Various governmental agencies utilize CPS to obtain specific information.

The current CPS sample is spread over 461 areas comprising 923 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. Approximately 47,000 occupied housing units comprise the sampling frame sites for interviews each month. Of this number, 2,000 occupied units, on the average, are visited without obtaining interviews because the occupants are not found at home after repeated calls or are unavailable for some other reason. In addition to the 2,000, about 8,000 sample units are visited in an average month but are found to be vacant or the occupants are not available to be interviewed.

Survey of Income and Education (SIE)

In response to the Education Amendments of 1974, the Survey of Income and Education was designed to yield State estimates of target-group populations—specifically, school-age children in poverty and persons of limited English-speaking ability. The survey revises the 1970 Census poverty counts and provides, for the first time, State data on persons of limited English-speaking ability. In addition, the SIE also supplies needed data on the handicapped population and the population interested in further education but not currently enrolled.

Because of its special reporting requirements, the Survey of Income and Education deviates somewhat from the procedures employed in the Current Population Surveys. To report at the State level, the survey was designed to furnish estimates with approximately the same statistical reliability for each State. This required a larger sample, 190,000 households, distributed throughout the United States and the District of Columbia. Because of the respondent sensitivity anticipated for the income items, personal interviewing was chosen over the usual telephone mode.

Interviewing for the SIE was conducted during May, June, and July as opposed to March for the CPS. The later collection period holds some advantage in that it occurred shortly after the income tax filing date, providing respondents with an easy reference for income information. However, collection in the later period may have produced some reporting problems in recalling income and work experience for the previous year.

The unusually large size and wide distribution of the sample required hiring interviewers with little previous experience. Although these temporary interviewers underwent a rigorous training period, their limited experience relative to that of regular CPS interviewers should be kept in mind when comparing SIE to CPS data.

Because the SIE was a one-time survey, it did not suffer from the problem of respondent conditioning to repeated interviews found in the CPS. It has been documented that in the CPS, as the number of interviews increases, respondent cooperation declines. The lack of respondent conditioning and the use of the personal interview may contribute to the lower nonresponse rate on the SIE. A more complete evaluation of how the SIE results may differ from previous Census data is forthcoming.

Annual Housing Survey

For the Department of Housing and Urban Development, the Bureau of the Census annually conducts a sample survey of housing units to ascertain the sizes and compositions of housing units and the characteristics of their occupants. The 1975 survey included for the first time items tapping occupants' opinions of the adequacy of neighborhood services.

The sample of approximately 79,900 housing units was selected from units enumerated in the 1970 Census and updated to include new construction. Information was obtained through personal interviews of the occupants from October to December 1975. A detailed presentation of the methodology and the data is available in the report.

Organization for Economic Cooperation and Development

The international statistics on participation of youth in education and work are based on material collected from Organization for Economic Cooperation and Development (OECD) member nations. Some adjustments of the national data have been made for international comparability. The figures on education enrollment include only those in full-time education, and the labor force figures include the armed forces. Otherwise the main adjustment made was for the purpose of uniformly covering the 15- to 19-year-old groups. However, the latter adjustment was not possible for the tables on unemployment.

The figures on teenage labor force participation, obtained from national sources, vary in coverage. In Italy, the national sources usually group 14- to 19-year-olds, and in the United Kingdom and the United States the data generally available refer to 16- to 19-year-olds. In Canada, France, Germany, and Japan, national sources are readily available for the age group 15 to 19.

In most tables figures for 15- to 19-year-olds have been adjusted to a uniform basis. For education enrollment no adjustment was necessary. For labor force participation in Italy, the 14-year-olds normally included in the national sources were eliminated. For the United States, figures on labor force activity of 14- and 15-year-olds as a group are still regularly collected by the Bureau of Labor Statistics, even though the normal age cut-off point for inclusion in the labor force has been 16 since 1966. It was assumed that half of the 14- to 15-year-old group in the labor force were 15-year-olds. It was also assumed that because of birth-rate declines, there will be 800,000 15-year-olds in the 1980 labor force, and 600,000 in 1990. In the United Kingdom the school-leaving age was raised from 15 to 16 in the 1972–73 school year, and it was assumed that no 15-year-olds in that nation worked after that date. Further information on the statistics available from each of the countries can be obtained from OECD.

American Council on Education

American Freshman Survey

Sponsored by the American Council on Education (ACE), the annual survey of college freshmen is administered through the Cooperative Institutional Research Program at UCLA. Since 1966 the survey has collected biographic and demographic data on each national freshman class, as well as data on career plans, educational aspirations, financial arrangements, and current attitudes. The 1977 survey obtained usable information from 198,641 freshmen in 374 institutions of higher education listed with the Office of Education. Only data from institutions whose coverage of entering students was judged representative were used. The weighted data reflect the responses of first-time, full-time freshmen obtained during the initial weeks of the fall term. A full discussion of the design and sampling procedures is provided in *The American Freshman: National Norms For Fall 1977,* available from the Cooperative Institutional Research Program, UCLA.

Higher Education Panel Survey of Student Aid Recipients

The Higher Education Panel Survey of the American Council on Education is a continuing survey research program that was initiated in 1971. Its purpose is to conduct small-scale surveys on topics of current policy interest to the higher education community and government agencies. The 1976–77 survey on the characteristics of student aid recipients was the third ACE survey of student aid programs and participants.

The Higher Education Panel is based upon a network of campus representatives at 760 colleges and universities broadly representative of the more than 3,000 institutions of higher education listed in the NCES *Education Directory.* The survey instrument was mailed at the end of November 1976 to all 760 panel members for completion by the institutions' financial aid officers. By mid-January, the cutoff date for return of questionnaires, usable responses had been received from 608 colleges and universities. Six surveyed institutions were excluded from the data base either because their students were wholly supported by the Federal Government or because, for other reasons, they did not participate in Office of Education aid programs. Thus, of the eligible sample of 754 institutions, 81 percent responded. The data from responding institutions were statistically adjusted to represent the national population of 3,031 colleges and universities. The methodology and an analysis of the results are presented in *Estimated Number of Student Aid Recipients 1976–77,* available from the Higher Education Panel, American Council on Education.

Gallup Poll

Through funding provided by the Institute for Development of Educational Activities, Inc., the Gallup Poll conducts annual surveys of the public's attitudes toward education. Each year the Poll interviews approximately 1,600 adults, representative of the civilian noninstitutional population 18 years old and over. A full description of the sampling methodology appears in "Ninth Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan,* September 1977.

National Opinion Research Center

The National Opinion Research Center annually collects information on the characteristics and opinions of the adult noninstitutional population. Through its General Social Survey, it interviews approximately 1,500 English-speaking persons 18 years old and over, on their attitudes toward a variety of concerns. The survey instrument, a description of the methodology, and the data marginals appear in *National Data Program for the Social Sciences: Codebook for the Spring, 1977,* published by the National Opinion Research Center/University of Chicago.

Foundation For Child Development

In conjunction with Temple University's Institute for Survey Research, the Foundation for Child Development interviewed a national cross-section of 2,200 children, 7 to 11 years old, along with their parents in December 1976. In spring 1977, subsequent interviews were conducted with these children's teachers. The resulting data offer a profile of parent-pupil-and-school relationships, along with a general picture of the way children live and perceive their lives. A full report is expected to be issued soon. Additional information is obtainable from the Foundation for Child Development.

National Education Association

Every 5 years since 1956 the National Education Association has conducted a nationwide survey of public school teachers. From questionnaires completed by a probability sample of classroom teachers the survey reports on the composition of the teaching profession and on conditions in the teaching field. The sampling procedures, survey instrument, and findings are presented in the full report, *Status of the American Public School Teacher 1975–76,* available from the National Education Association.

Study of Earning Differentials Among Male Wisconsin High School Graduates of 1957

To analyze the changing effects of parental income, ability, and schooling on earnings, Hauser and Daymont examined the patterns of growth in earnings among male high school graduates 8 to 14 years after high school. Using a simple recursive model, the researchers estimated the total and direct effects on subsequent earnings of (1) parental income at the time of high school, (2) mental ability expressed in intelligence quotients, and (3) education in years of postsecondary schooling. The study covered male Wisconsin high school graduates in 1957 for whom all essential data were available, who were not farmers, and whose earnings were greater than $3,000. Complete information was available for 3,496 members, or 72 percent of the original sample. The methodology, statistical procedures, and findings are presented by Robert M. Hauser and Thomas N. Daymont in "Schooling, Ability, and Earnings: Cross-sectional Findings 8 to 14 Years After High School Graduation," *Sociology of Education,* 50 (1977), 182–205.

Definitions of Selected Terms

Adult education: Organized instruction including correspondence courses and private tutoring, ordinarily under the auspices of a school, center, or community organization, and generally with a predetermined end result which may be a certificate, diploma, or degree. Participants in adult education are persons beyond compulsory school age (17 and over) who are not enrolled full-time in a regular school or college program but who are engaged in activities of organized instruction.

Aggregate United States: The 50 States, District of Columbia, and outlying areas—American Samoa, Canal Zone, Guam, Puerto Rico, the Virgin Islands, and the Trust Territory of the Pacific Islands. Several NCES surveys report data for the aggregate United States.

Auxiliary enterprises (higher education): Services to students, faculty, or other staff for which a fee is charged that is directly related to, but not necessarily equal to, the cost of service (e.g., dormitories, food service, and student stores).

Average daily attendance: Aggregate days attendance during a regular school term divided by the number of days school was in session.

Average daily membership: Aggregate days membership during a regular school term divided by the number of days the school was in session.

Bachelor's degree: Lowest degree conferred by college, university, or professional school, requiring 4 or more years of academic work.

College enrollment: Enrollment in a course which leads to a bachelor's, master's, professional, or doctorate degree, excluding vocational certification used in the Current Population Survey.

Constant dollars: Financial data which have been adjusted by means of price and cost indexes to eliminate inflationary factors and allow direct comparison across years.

Current dollars: Financial data which have not been adjusted to compensate for inflation.

Direct expenditures: Payment to employees, suppliers, contractors, beneficiaries, and other final recipients of governmental payments; i.e., all expenditures other than intergovernmental expenditures.

Doctor's degree: Highest academic degree conferred by a university, including Ph.D. in any field, doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).

Dropouts: Persons not enrolled in school and not high school graduates.

Elementary education: Formal education organized by grade, composed of a span of grades not above grade eight.

Executive/administrative/managerial positions (higher education): Positions for employees who exercise primary responsibility for the management of the institution, or of a customarily recognized department or subdivision. Examples of positions included in this category are: president, controller, dean, director, assistant to the president, assistant dean, assistant director.

Expenditures: For elementary and secondary schools, all charges for current outlays for education, plus capital outlays and interest on school debt. For institutions of higher education, current outlays plus capital outlays. For government, net of recoveries and other correcting transactions—other than for retirement of debt, investment in securities, extension of credit, or as agency transactions. Government expenditures include only external transactions of a government and exclude noncash transactions such as the provision of perquisites or other payments in kind. Aggregates for groups of governments exclude intergovernmental transactions among the governments.

Family: A unit consisting of a household head and one or more other persons living in the same household who are related to the head by blood, marriage, or adoption; all persons in a household who are related to the head are regarded as members of his (her) family.

First-professional degree: An academic degree which requires at least 2 academic years of previous college work for entrance and at least 6 academic years of college work for completion. Beginning in 1965–66, NCES classification includes the following degrees only: law (LL.B. or J.D.); dentistry (D.D.S. or D.M.D.); medicine (M.D.); veterinary medicine (D.V.M.); chiropody or podiatry (D.S.C. or D.P.); optometry (O.D.); osteopathy (D.O.); and theology (B.D.).

First-time students: Students not previously enrolled in any institution of higher education.

Full-time students: Students enrolled in courses with credits equal to at least 75 percent of the normal full-time course load.

Geographic region: Regions used by the Bureau of Economic Analysis, U.S. Department of Commerce:

Northeast
Connecticut
Delaware
District of Columbia
Maine
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

Southeast
Alabama
Arkansas
Florida
Georgia
Kentucky
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Virginia
West Virginia

Central
Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

West
Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oklahoma
Oregon
Texas
Utah
Washington
Wyoming

The same regional scheme is used by the National Assessment of Educational Progress and the Bureau of the Census (for data on education participation).

The elementary and secondary school data from the Office of Civil Rights pertain to the contiguous United States and follow the regional classification scheme below:

Northeast
Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

Border
Delaware
District of Columbia
Kentucky
Maryland
Missouri
Oklahoma
West Virginia

South
Alabama
Arkansas
Georgia
Florida
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Texas
Virginia

Midwest
Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

West
Arizona
California
Colorado
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Handicap: A health condition—physical, emotional, or mental—which limits or interferes with a person's ability to do regular school work or which limits a person's ability to participate in recreational activities.

Higher education: Study beyond the secondary school level at an institution that offers programs terminating in an associate, baccalaureate, or higher degree.

Instruction/research positions (higher education): Positions for staff employed for the primary purpose of performing instruction, research, or both instruction and research activities. These positions exclude graduate students employed as teaching or research assistants.

Instruction/research assistant positions (higher education): Positions for staff employed for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research. These positions are typically held by graduate students having such titles as teaching assistant, teaching associate, teaching fellow, or research assistant.

Master's degree: An academic degree higher than a bachelor's but lower than a doctor's. All degrees classified as first-professional are excluded.

Noncollegiate postsecondary school: An institution beyond the high school level which does not offer programs terminating in an associate, baccalaureate, or higher degree.

Nonprofessional employees: Persons engaged in job assignments for which the educational requirement is below the level of a bachelor's degree and which can be categorized as technical, office/clerical, crafts and trades, or service.

Official/administrative positions (elementary and secondary): Positions for staff engaged in management or supervisory activities, including superintendents and assistants, principals and assistants, administrative assistants and interns, foremen, supervisors, managers, and directors.

Organized research (higher education): All sponsored research and all separately budgeted research. Excludes research carried on as part of the regular instructional services.

Poverty: The current measure of poverty that was originally developed by Mollie Orshansky of the Social Security Administration in 1964 and was, with revisions, officially adopted in 1969 by the Office of Management and Budget as the Federal Government's official statistical measure of poverty. The measure is built around the Department of Agriculture's economy food plan of 1961 and the national average ratio of family food expenditures to total family after-tax income as measured in the 1955 Household Food Consumption Survey. It consists of 124 separate poverty lines differentiating families by size, number of children, age and sex of head, and farm or nonfarm residence. The poverty lines are updated annually by changes in the Consumer Price Index.

Preprimary program: A set of organized educational experiences intended for children attending prekindergarten and kindergarten classes. Such programs may be offered by a public or nonpublic school or by some other agency. Children enrolled in Head Start programs are counted under prekindergarten or kindergarten, as appropriate. Institutions which offer essentially custodial care, such as day care centers, are not included.

Professional—educational positions (elementary and secondary): Positions for staff engaged in activities requiring a high degree of knowledge and skills acquired through at least a baccalaureate degree (or its equivalent), including skills in the field of education or education psychology. Staff for these positions include teachers, curriculum specialists, counselors, librarian/media specialists, and remedial education specialists.

Professional—other positions (elementary and secondary): Positions for staff engaged in activities requiring at least a baccalaureate degree or its equivalent, but not requiring skills in the field of education.

Racial/ethnic group: Classification based upon self-identification of the individual.

Regular day schools: Schools that satisfy the requirements of State education laws and offer at least one grade beyond kindergarten. Not included in this category are residential schools for exceptional children, Federal schools for Indians, federally operated schools on Federal installations, and subcollegiate departments of institutions of higher education.

Related activities (higher education): Activities which exist to provide instructional or laboratory experience for students and which incidentally create goods or services that may be sold on the campus or to the general public.

Revenues: All amounts of money received by an institution from external sources, net of refunds, and correcting transactions. Noncash transactions such as receipt of services, commodities, or other receipts "in kind" are excluded, as are funds received from the issuance of debt, liquidation of investments, and nonroutine sale of property.

School district: An educational agency at the local level which exists primarily to operate public schools or to contract for public school services. This term is used synonymously with the terms "local basic administrative unit" and "local education agency".

Secondary education: Formal education organized by subject matter taught, composed of junior high and/or high schools.

Special/support positions (higher education): Positions for staff employed for the primary purposes of performing academic support, student services, and institutional support activities. These include positions for librarians, accountants, systems analysts, student personnel workers, counselors, salesmen, and recruiters.

Student charges: Charges for tuition, required fees (matriculation, laboratory, library, health, etc.), room, and board. Charges for books are excluded.

Student education (higher education): Activities which are most closely related to instruction. Includes instruction and research which are part of regular instructional services (departmental research), extension and public service, libraries, physical plant operation and maintenance, general administration, and other sponsored activities.

Undergraduate students: Degree-credit or non-degree-credit students who have not received formal recognition as having completed the prescribed degree-credit or non-degree credit requirements of an accredited institution of higher education.

Unemployment rate: The number of unemployed persons as a percent of the civilian labor force.

Usual household language: The language which is usually spoken by the people who live in the household.

The Condition of Education

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